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NASA CR-159968

**SPACE TRANSPORTATION SYSTEM
THERMAL ENVIRONMENTAL FLUX
REFERENCE BOOK**

prepared for

**NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION**

GODDARD SPACE FLIGHT CENTER

GREENBELT, MARYLAND

prepared by

**ARTHUR D. LITTLE, INC.
CAMBRIDGE, MASSACHUSETTS**

OCTOBER 1979

C-79393-07



(NASA-CR-159968) SPACE TRANSPORTATION
SYSTEM THERMAL ENVIRONMENTAL FLUX REFERENCE
BOOK (Little (Arthur D.), Inc.) 466 p
HC A20/MF A01

CSCL 22B

G3/16

N80-24353

Unclas
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SPACE TRANSPORTATION SYSTEM

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I. PURPOSE

The purpose of this data book is to provide experimenters with the necessary information to estimate the thermal environment in which their proposed instruments will be expected to operate. The data contained in this book consists of curves and tables which indicate the magnitude of the environmental fluxes which can be expected for various Space Transportation System (STS) missions. A typical drawback of a reference document of this type is that it cannot cover the infinite number of combinations of STS orbiter attitudes, orbit definitions, and payload configurations. The data contained in this document, if used properly, can provide enough information for experimenters to make a first estimate of the expected thermal performance of their proposed instruments.

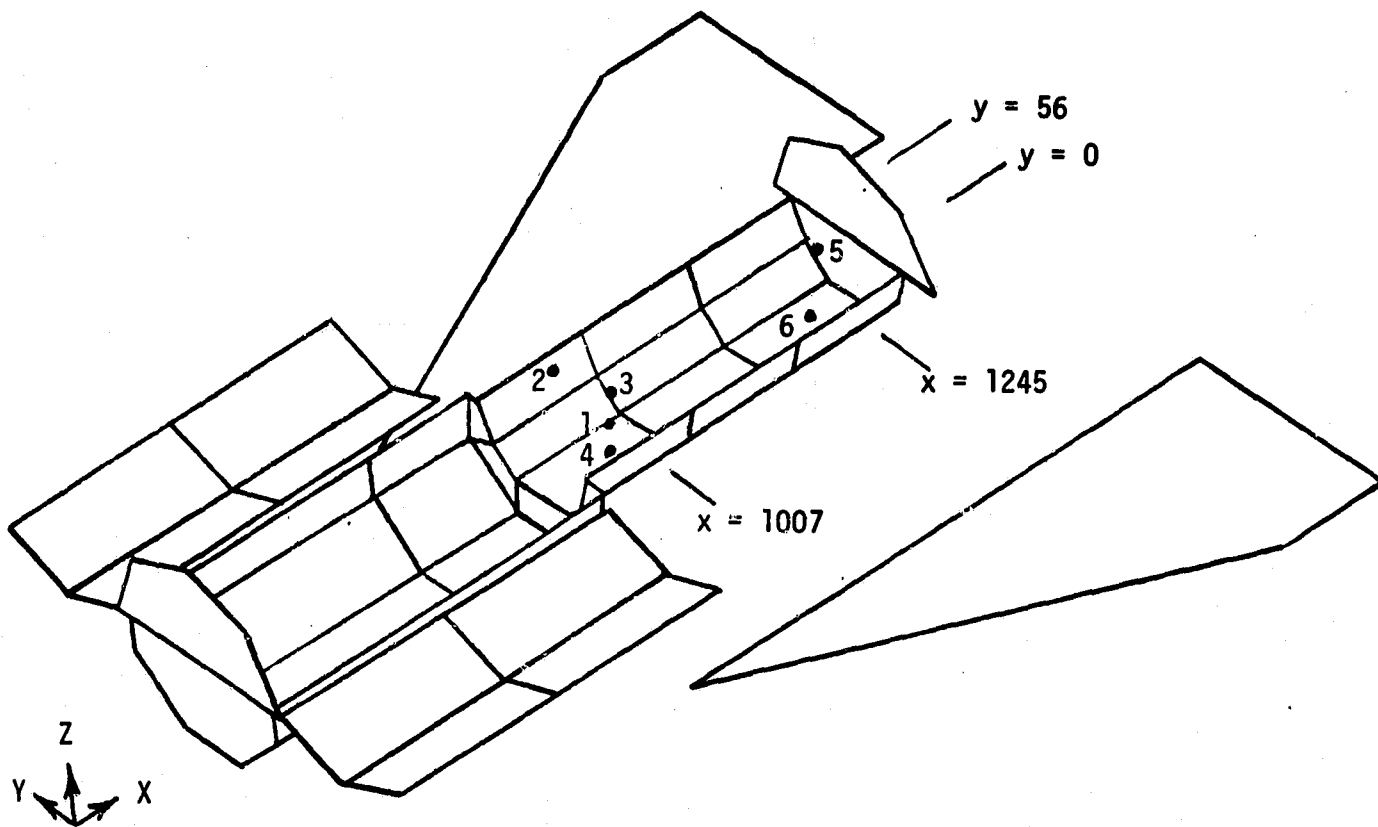
II. DATA DESCRIPTION AND ORGANIZATION

The flux data contained in the tables and curves of this document represent the total thermal environmental flux incident to surfaces at various locations in the shuttle cargo bay. These fluxes were computed using a geometric model of the shuttle cargo bay (see Figure 1) and defining cubes with surfaces facing in the same direction as each of the axes of the shuttle coordinate system. Six separate cubes were defined at different locations in the cargo bay to provide a good cross section of flux data representative of potential instrument locations. The six locations selected are indicated in Figure 1. The cube models were defined in a manner to determine the thermal flux incident to each cube surface from only the shuttle cargo bay or pallet surfaces. Care was taken to avoid any interaction or influence between the individual cubes. The surface properties used for the geometric model and the cube surfaces are listed in Table 1.

The shuttle model used contains surfaces representing a train of three pallets toward the aft end of the cargo bay. Although specific missions may contain more or less pallets, or the instrument may even be mounted directly in the cargo bay, the information generated with this model can provide a basis for a first estimate of the thermal performance of potential STS orbiter payloads.

The orbiter orientations and the orbit definitions that were used to generate the flux data for this document are described in Table 2. A pictorial description of the parameter definitions is shown in Figures 2 and 3. All orbits were assumed to be circular with motion of the orbiter being as shown in Figure 2.

Information was generated for each of the orbiter orientations indicated in Figure 3 at two altitudes, 250 kilometers and 450 kilometers. Five beta angle definitions of 0° , 30° , 60° , 90° , and



<u>Location</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
1	1007	0	400
2	1007	56	414
3	1007	0	440
4	1007	0	360
5	1245	0	440
6	1245	0	360

FIGURE 1 LOCATION OF FLUX DATA POINTS
IN MODEL OF CARGO BAY

Note: Coordinate system used to define cube locations is identical to shuttle coordinate system.

TABLE 1
SURFACE PROPERTIES FOR FLUX MODEL

	<u>α</u>	<u>ϵ</u>
Cargo Bay Liner	.32	.8
Forward and Aft Bulkheads	.32	.8
Radiators	.08	.8
Wings (top only)	.32	.8
Pallet Surfaces	.32	.8
Cube Surfaces	.99	.99

$\alpha \equiv$ UV absorptance

$\epsilon \equiv$ IR absorptance/emittance

TABLE 2

ORBIT/ORIENTATION PARAMETERS USED TO GENERATE FLUX DATA

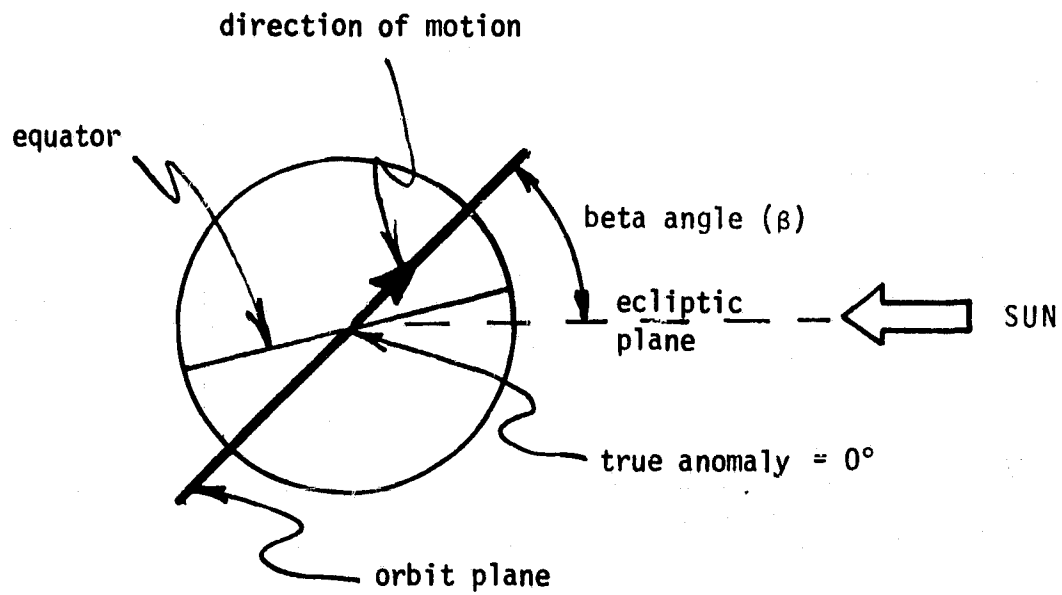
ORBIT PARAMETERS

ALTITUDE	- 250 km, circular - 450 km, circular	} For all orientations and beta angles
BETA ANGLE	- 0°, 30°, 60°, 90°, -45° - 0°, 45°, 90° - 0°, 45°	
		For orientations 1 thru 7 below
		For orientation 8a below
		For orientation 8b and c below
SOLAR CONSTANT	- 429 BTU/hr - ft ² (1350 w/m ²)	
EARTH ALBEDO	- .3	
EARTH I.R.	- 74.5 BTU/hr - ft ² (234 w/m ²)	

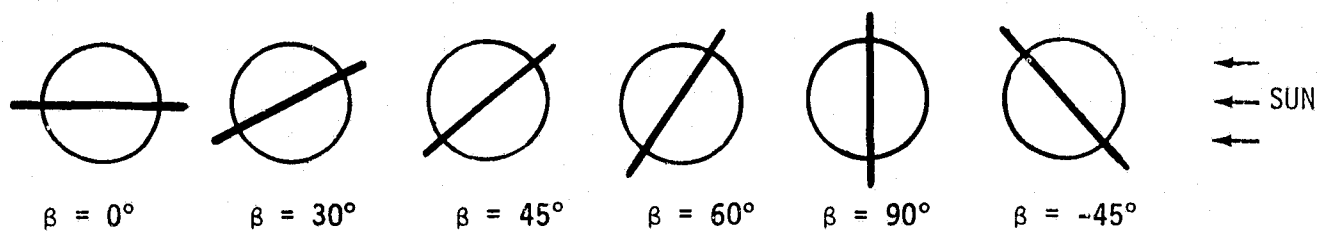
ORBITER ORIENTATIONS (see Figure 3)

1. Nose to sun (-x solar inertial), bay facing north ecliptic pole
2. Nose down 45° to sun (-x solar inertial, 45° pitch about y axis)
3. Bay to sun (+z solar inertial), tail facing north ecliptic pole
4. Bay 45° to sun, tail facing north ecliptic pole (45° roll about x axis)
5. -y to sun (-y solar inertial), tail facing north ecliptic pole
6. Bottom to sun (-z solar inertial), tail facing north ecliptic pole
7. Bay earth oriented (+z facing earth), nose in direction of flight
8. Passive thermal control (PTC) @ 2 revolutions per hour about x axis
 - a. bay (+z) towards sun at true anomaly = 0°
 - b. bottom (-z) towards sun at true anomaly = 0°
 - c. bay (+z) towards earth at true anomaly = 0°

FIGURE 2

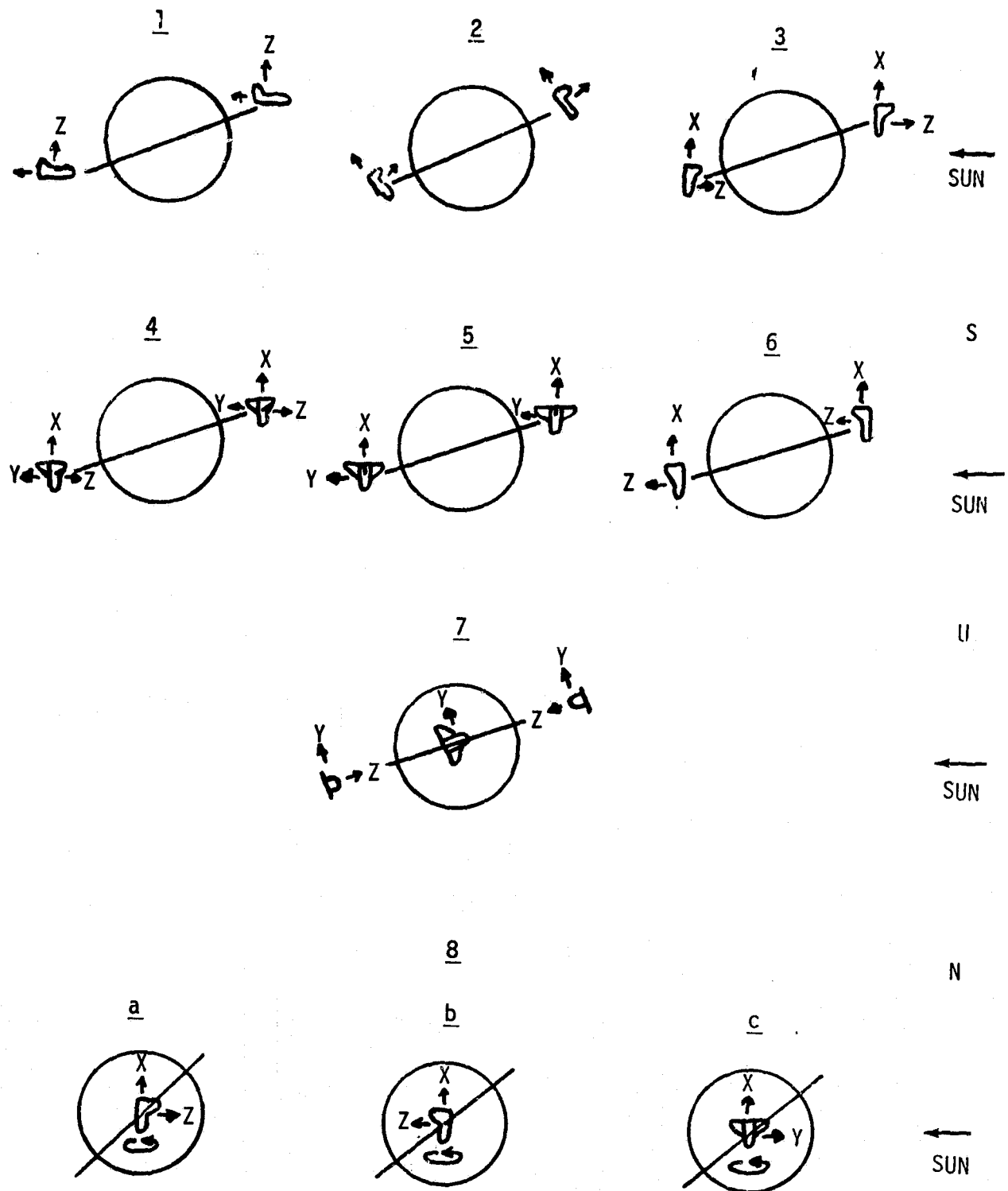


PARAMETERS USED TO DEFINE ORBIT AND POSITION



BETA ANGLE DEFINITION

FIGURE 3



(rotating at 2 rev/hr)

ORBITER ORIENTATIONS

-45° were used for each of the first seven orbiter orientations. Separate beta angles, as indicated in Table 2, were used for the three orbits defining the PTC attitudes. Flux data for a total of 84 attitude/orbit combinations was generated for this document.

The attitudes and orbits selected represent a wide range of possible orientation/orbit combinations and should provide the necessary information to determine the thermal flux data for most potential mission profiles.

It is presumed that the data will be used to determine the absorbed energy on all or selected surface(s) of a particular experiment for the purpose of estimating its thermal performance. This absorbed energy is dependent on the optical properties of a particular surface, which are usually different for short wavelength radiation, typical of the solar spectrum, and long wavelength radiation, typical of earth emitted radiation. For this reason, the thermal flux data contained in this document has been separated into its short wavelength (solar and earth albedo) and long wavelength (earth I.R.) components.

The flux data presented in the tables and graphs of this document includes both the direct radiation and that radiation which is reflected from the cargo bay liner and pallet surfaces.

The thermal flux data is presented in the form of, first, a table indicating the orbit-averaged direct and reflected flux; second, a series of graphs indicating the flux as a function of position in orbit with 0° being at 90° before the sub-solar point (see Figure 2); and, third, a table showing the energy which is re-emitted from the cargo bay liner and pallet surfaces (assuming adiabatic surfaces).

The curves that indicate the transient flux contain six curves per graph, each of which is for one of the six surfaces of a single cube. The curves are distinguishable by a characteristic symbol representing the coordinate system direction a particular surface is facing.

The following list indicates which symbol is associated with which surface direction (also see Figure 1):

□ +X

⬡ +Y

△ +Z

+ -X

X -Y

◇ -Z

The energy which is re-emitted from the cargo bay and pallet surfaces is only in the long wavelength (IR) region. Therefore, only one table is included with each of the 84 different conditions.

III. USE OF FLUX DATA

The information contained in this book must be used cautiously in estimating the thermal performance of experiments proposed for the STS orbiter cargo bay. There are obvious limitations to the data, the most significant being the lack of representation of a total payload configuration. Analysis of specific payload configurations has indicated that there is interaction between individual instruments which can affect thermal performance. This is particularly true of instruments which may be relatively small in size and which may be in close proximity to larger instruments. A good thermal design philosophy for this situation may be to isolate those surfaces which may be significantly influenced by surrounding instruments and select a surface which has a relatively clear "view" of space and/or cargo bay surfaces and use that surface as the primary thermal control surface (i.e., radiator). The flux data pertinent to that surface for a specific orbiter orientation and orbit definition can then be extracted from the appropriate table and/or curve. This data can be used to select coatings of the thermal control surface and to get a first estimate of the thermal performance of the proposed instrument.

For those instruments which are relatively large and are not significantly affected by surrounding payloads, the data from the appropriate table and/or curves can be used to determine the environmental flux to those surfaces of interest and again the thermal performance of the instrument can be estimated.

It is doubtful that the majority of mission profiles and payload locations will coincide exactly with those locations for which flux data has been generated. Most cases will require some interpretation of the data in this book. This section contains a general description of the use of the data in this document followed by some specific examples which demonstrate the proper use of the data.

First, the experimenter should decide which cube location(s) and surfaces best represent his (her) potential instrument location in the cargo bay or for which locations thermal flux information is desired. It may even be possible that two or more cube locations will be used to describe the flux environment at different locations on the same instrument.

Next, the appropriate orbit/orientation combination(s) which best coincides with the specific mission profile under study must be determined. The proposed use of the STS indicates that typical mission profiles include one or more orbiter maneuvers. This may require the use of data from more than one set of orbiter orientation flux tables and curves.

Depending on the particular design and requirements of the instrument, data from either (or both) the orbit averaged tables and/or the transient curves can be used to determine the flux incident to the external surfaces of the instrument. This data may then dictate the method of thermal control acceptable for a particular instrument, whether it be a passive design with radiators, possibly louvres, and heaters, or a design which must rely on the shuttle fluid loop system (i.e., pallet cold plates). Another use of the data may be for determining the preferred orientation of an instrument's aperture which may be sensitive to the thermal environment (i.e., solar radiation).

Once the preliminary thermal design has been established, the flux data can then be used to estimate the thermal performance of the instrument. Appropriate surface properties can be applied to the environmental fluxes determined from the incident flux data to obtain the absorbed energy on external surfaces. The I.R. emittance of each external surface will then determine the heat rejection capability of each surface. This will result in the heat balance for each external surface and, thus, the temperature of that surface. Using the resulting external surface temperatures as boundary conditions, the experimenter can then estimate the thermal performance of his/her instrument.

Again, caution must be used in both establishing the thermal design and estimating the instrument's thermal performance because of the absence of the potential influence of surrounding payloads. If possible, it is a good philosophy to isolate the instrument as much as possible from the surrounding "unknown" environment, thereby reducing the uncertainties in the thermal design and estimated performance. The following specific examples will better demonstrate the intended use of the flux book.

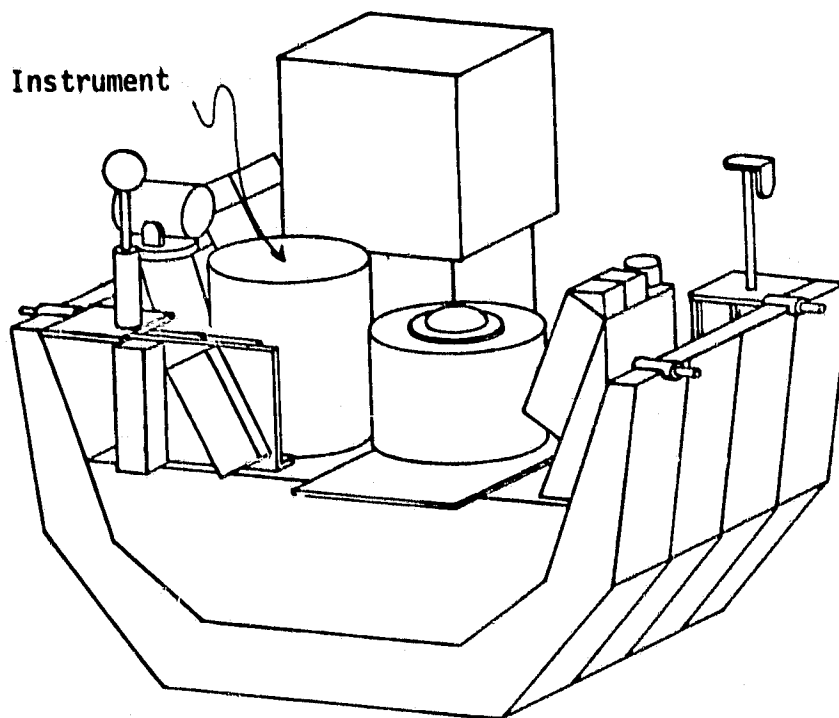
Example 1:

This first example is concerned with an instrument designed by the Columbia Astrophysics Laboratory (CAL) to be flown in the shuttle cargo bay as part of the OSS-1 payload. The relative location of the CAL instrument with respect to the OSS-1 payload configuration is shown in the accompanying figure. The pallet itself will be located toward the aft end of the cargo bay at approximately the location of the second pallet in the model used to generate the flux book. Because of the configuration of the payload, specifically the close proximity of the instrument just aft of the CAL instrument and the location of the CAL instrument on the pallet, flux data for different surfaces on different cubes will best represent the actual flux incident to the CAL instrument. To be more specific, the flux data generated for the +y, -x, and -y surfaces for the cube at location 2 will be used for the corresponding surfaces on the CAL instrument. The flux data generated for the +x and +z surfaces for the cube at location 5 will be used for the corresponding surfaces on the CAL instrument. No flux data is needed for the -z surface since it is mounted directly to a pallet surface.

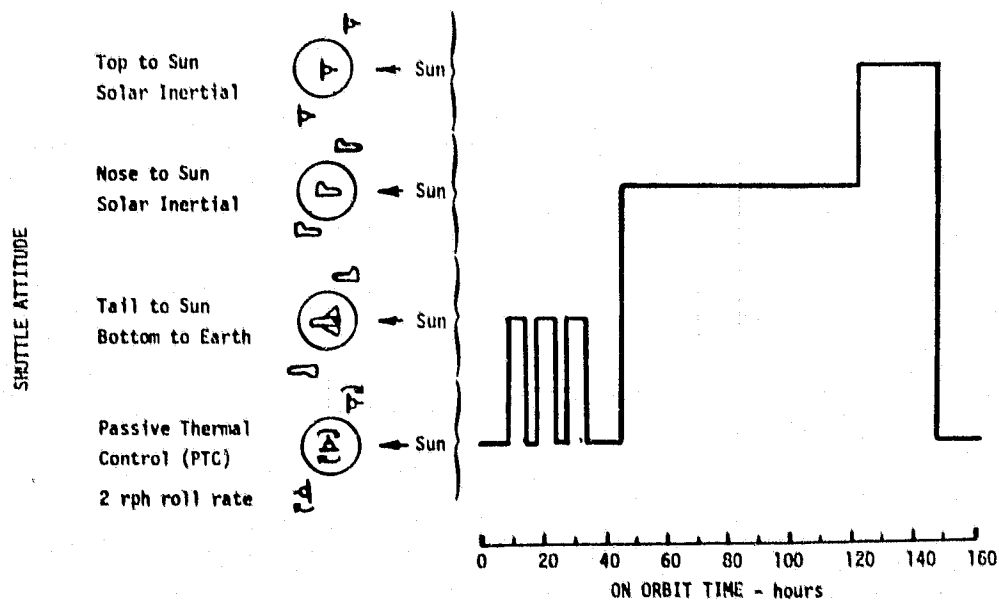
The proposed mission profile for the OSS-1 mission is also shown in the accompanying figure. Since the instrument will be operated only when the orbiter is oriented in either the nose to sun or top (bay) to sun, the design will consider only those two orientations. For the first pass at a thermal design, only orbital average fluxes need be considered. It is not necessary at this point to know the areas involved since the objective of this effort is to determine the temperatures of the external surfaces to be used as boundary conditions for the analysis of the interior, or critical parts, of the instrument.

The incident flux data from the appropriate tables are listed below with the table reference from which they were taken. All were taken from fluxes generated for an altitude of 450 km and a beta angle of 90°. The actual proposed mission altitude is approximately 444 km (240 nm) at a beta angle of 80°.

CAL Instrument



OSS-1 PAYLOAD/CAL INSTRUMENT LOCATION



OSS-1 MISSION PROFILE

<u>Incident Flux (watts/ft²)</u>						
<u>CAL Surface</u>	<u>Case 1 / -X Solar Inertial</u>			<u>Case 3 / +Z Solar Inertial</u>		
	<u>UV</u>	<u>IR</u>	<u>IR from Bay</u>	<u>UV</u>	<u>IR</u>	<u>IR from Bay</u>
{ +z	0.4	6.8	0.6	127.7	5.2	4.3
{ +x	0.3	2.1	5.0	20.8	2.0	37.3
{ +y	0.3	4.1	3.4	41.0	4.1	27.4
{ -x	0.5	3.4	3.5	31.9	3.9	32.1
{ -y	0.3	4.1	3.3	34.2	4.0	30.5

As would be expected and as indicated by the incident flux table above, the orientation where the open bay is facing the sun (Case 3 / +z solar inertial) provides the most severe thermal environment for the CAL instrument. The original thermal design for the instrument was to utilize a passive thermal control system. For such a design the first step is to locate an area for a heat rejection radiator. Assuming properties (α and ϵ) which may be typical of a radiator, we can calculate the effective temperature of each surface using the following equation:

$$T = \sqrt[4]{\frac{\alpha(\text{UV flux}) + \epsilon(\text{IR flux})}{\sigma \epsilon}}$$

where

$$\sigma = 5.27 \times 10^{-9} \text{ watts/feet}^2 - \text{kelvins}^4$$

$\alpha \equiv$ UV absorptance (dimensionless parameter)

$\epsilon \equiv$ IR absorptance/emittance (dimensionless parameter)

The results of those calculations are as follows:

Surface	Temperature - °C(K)	
	$\alpha/\epsilon=.1/.75$ (AgFEP)	$\alpha/\epsilon=.25/.85$ (white paint)
+z	-2.4 (270.8)	34.4 (307.6)
+x	25.9 (299.1)	31.7 (304.9)
+y	16.4 (289.6)	28.5 (301.7)
-x	22.6 (295.8)	31.6 (304.8)
-y	20.4 (293.6)	30.2 (303.4)

The results obviously show that the radiator should have properties similar to silverized teflon (AgFEP). The top surface (+z) should be the primary consideration for a radiator with the +y side being the second choice if necessary. All other surfaces will be assumed to be covered with an insulation blanket (MLI). Since beta cloth is being widely used in the cargo bay, we will assume the outer layer of insulation to be beta cloth ($\alpha^*/\epsilon = .32/.8$). Any internal power dissipation in the instrument has not been considered to this point but may now be applied to the radiator surface(s) to further develop the thermal design. By using the above properties for the outer layer of insulation and applying the internal power dissipation to the radiating surface, a new set of boundary temperatures can be computed and the thermal performance of the CAL instrument can be estimated for the "hot" case. The fluxes listed for Case 1 can now be applied to establish a new set of boundary temperatures. The results may even indicate the need for heater power to maintain an acceptable operating temperature.

We will not continue with the evolution and continuing analysis of this design, but hopefully this example will provide one way that the information in this book can be used.

* Effective absorptance of beta cloth backed by aluminized kapton.

Example 2:

For this example we will determine the thermal performance that can be expected of a Get Away Special (GAS) canister for a prescribed mission profile. The GAS canisters will be mounted up near the forward bulkhead on the cargo bay sill. The cube location which most closely resembles that of the GAS canister is location 2. The flux data for that location will be used to determine the external environment of the GAS canisters.

The orbiter orientation that will be used to simulate an assumed mission profile is Case 7 / +Z earth oriented at an altitude of 250 km and a beta angle of 60°. Again, only orbit-averaged data will be used. The incident flux data from the appropriate table is listed below:

<u>GAS Surface</u>	<u>Incident Flux (watts/ft²)</u>		
	<u>UV</u>	<u>IR</u>	<u>IR from Bay</u>
+z	8.4	19.0	0.2
+x	11.0	7.9	12.7
+y	6.7	7.8	13.3
-x	10.7	7.9	12.5
-y	24.0	8.0	10.4
-z	6.7	2.4	23.7

For the purposes of this example, we will assume that the top surface of the canister is to be used as a radiator ($\alpha/\epsilon = .25/.85$) with the sides and bottom covered with insulation ($\alpha/\epsilon = .32/.8$). After applying the appropriate surface properties to the corresponding incident flux data we can compute the surface temperatures using the same equation as in Example 1. The temperatures can then be used as boundary conditions and the thermal performance of the canister, specifically the internal heat rejection capability, can be determined.

Example 3:

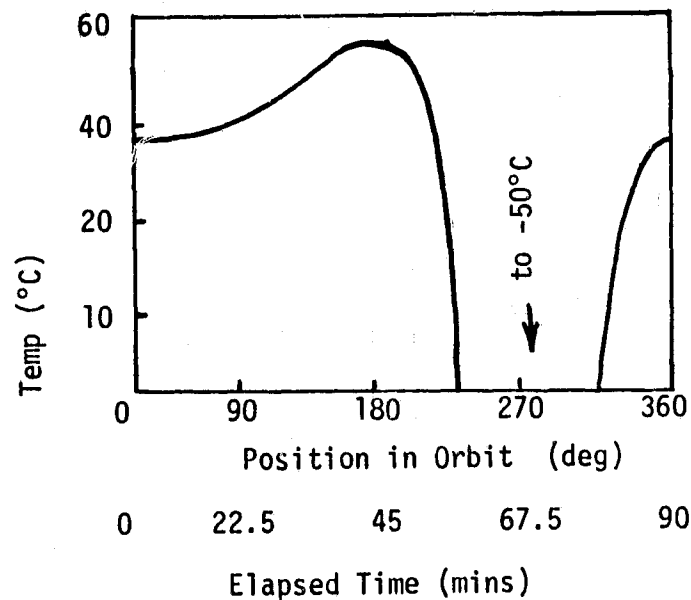
For this example we will demonstrate the use of the transient flux data contained in this document. This may be typical of the case of a thin membrane used to close out an instrument aperture. A surface of this type will be affected by the transient environment since it would probably have a very short time constant.

For the purposes of this example, we will assume the surface is facing in the +z direction at a location which can be simulated by location 1. We will also define the orbit as having an altitude of 250 km at a beta angle of -45°. The orbiter orientation will be simulated by using the data for Case 4 / +z solar inertial with a 45° roll about the x axis. The incident flux data for the above conditions as a function of position in orbit is as follows:

<u>Position</u>	<u>0</u>	<u>90</u>	<u>180</u>	<u>270</u>	<u>360</u>
Incident Flux (watts/ft ²)					
{ UV	90	92	90	0	90
{ IR	1	2	14.5	12	1

To simplify the example, only data at 90° intervals will be used. The IR flux emitted from the cargo bay is negligible (.4 w/ft²) compared to the total incident UV and IR from the environment for the selected surface and location.

If we assume surface properties for the surface we can compute the temperature profile of the surface as a function of position in orbit or elapsed time. Using properties typical of an aluminized kapton sheet, 5 mil thick ($\alpha/\epsilon = .47/.87$), we get the following temperature profile:



The above examples hopefully indicate the proper use of the flux data contained in this document. Any results generated from this data is only preliminary in nature and should not be construed as a final analysis on which an instrument's thermal performance can be based. Its intention is only as a guide in developing a first cut at a thermal design and performance prediction primarily for proposal use. In most cases, a more detailed analysis and design should be performed to verify the results obtained using the data in this document.

IV. FLUX DATA

The data contained on the following pages is organized in the following manner.

	ALTITUDE																			
	250 km										450 km									
	ORBITER ORIENTATION										ORBITER ORIENTATION									
	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8		
								a	b	c								a	b	c
BETA ANGLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	30	30	30	30	30	30	30	45	45	45	30	30	30	30	30	30	30	45	45	45
60	60	60	60	60	60	60	60	90			60	60	60	60	60	60	60	90		
90	90	90	90	90	90	90	90				90	90	90	90	90	90	90			
-45	-45	-45	-45	-45	-45	-45	-45				-45	-45	-45	-45	-45	-45	-45			

i.e., the first set of data is for an altitude of 250 km and beta angles of 0° to -45° with orbiter orientation of nose to sun (1) and the last set of data is for an altitude of 450 km at beta angles of 0° and 45° for a PTC orbit with the orbiter facing earth at 0° (8c).

FLUX DATA
FOR
ALTITUDE - 250 km
ORIENTATION NO. 1

Nose to sun, bay facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

GREITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

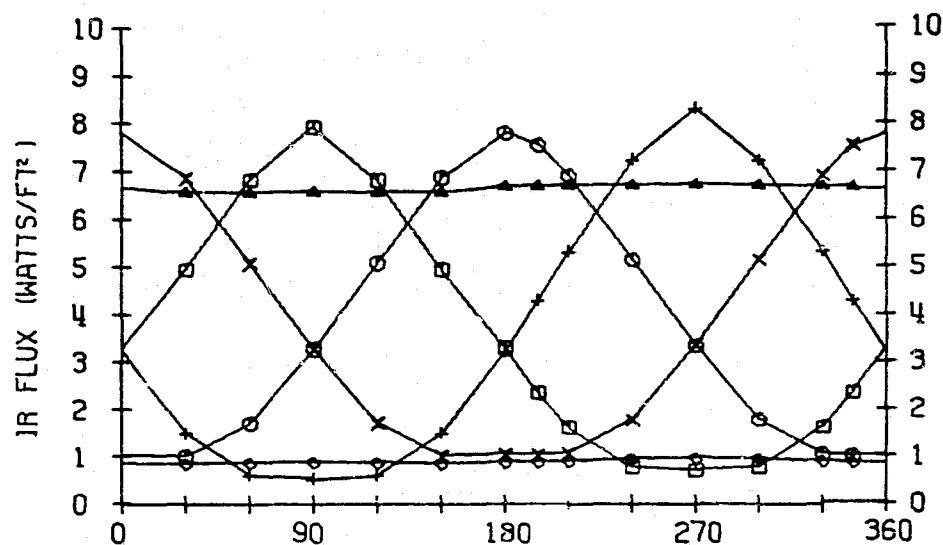
250 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
I	+X (□)	3.6	4.2	4.8	2.5	2.2	0.9
R	+Y (○)	3.7	4.4	5.6	2.1	5.2	1.6
F	+Z (△)	6.6	6.8	6.8	5.3	6.1	4.0
L	-X (+)	3.7	4.2	5.0	2.8	5.1	2.8
U	-Y (X)	3.7	4.3	5.6	2.1	5.2	1.6
X	-Z (◇)	0.8	0.9	1.0	0.9	0.9	0.7
U	+X (□)	4.2	4.8	5.2	3.3	1.8	0.9
V	+Y (○)	2.8	3.1	3.5	2.2	2.5	1.1
F	+Z (△)	3.6	3.7	3.7	3.1	2.8	1.4
L	-X (+)	1.4	1.4	1.4	1.5	1.1	0.9
U	-Y (X)	2.8	2.9	3.5	2.2	2.5	1.1
X	-Z (◇)	1.8	1.9	1.8	1.9	1.1	0.9

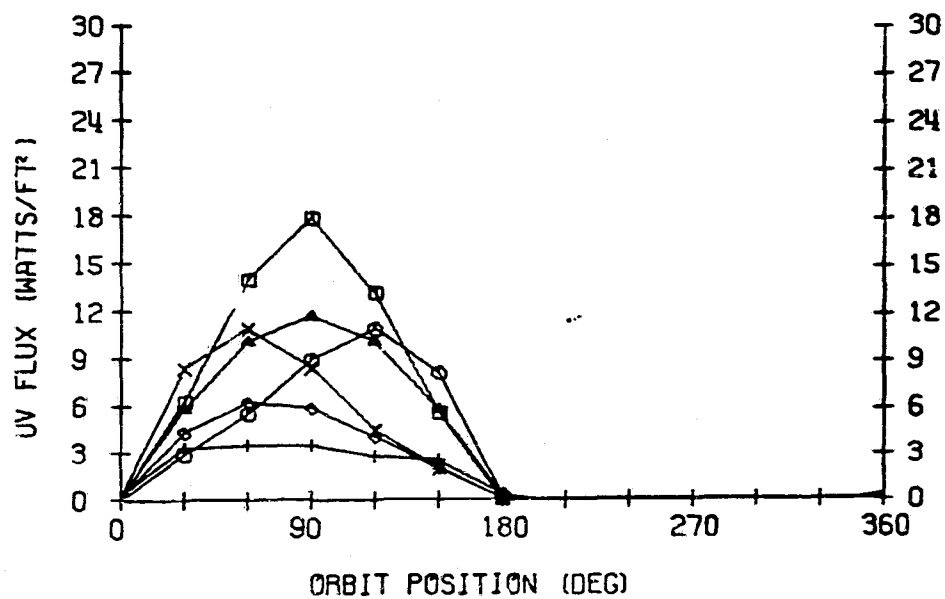
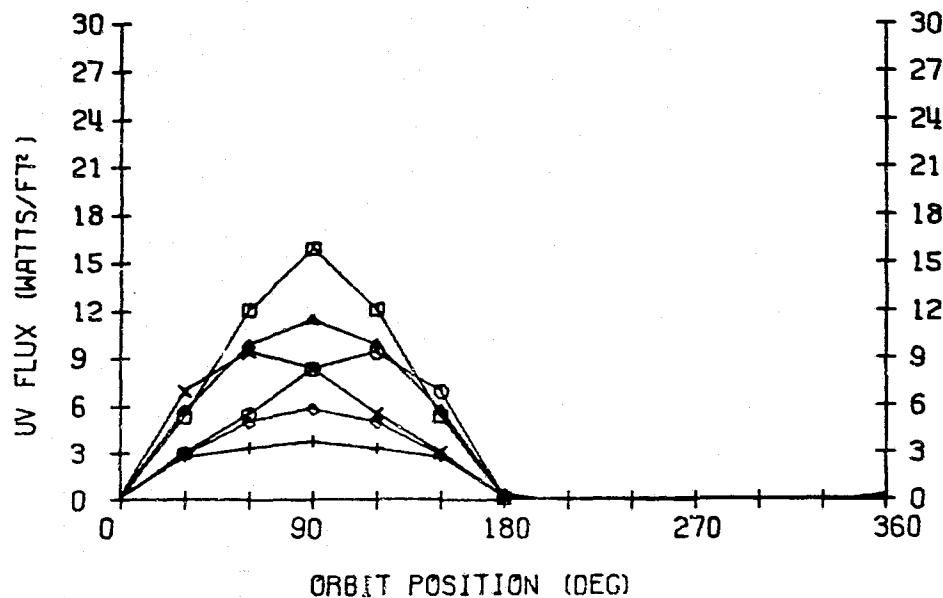
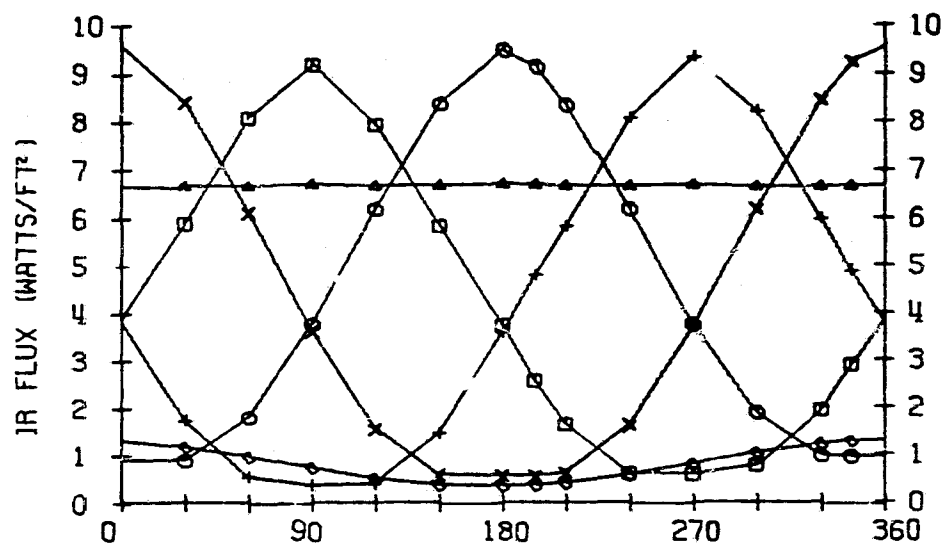
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250 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1

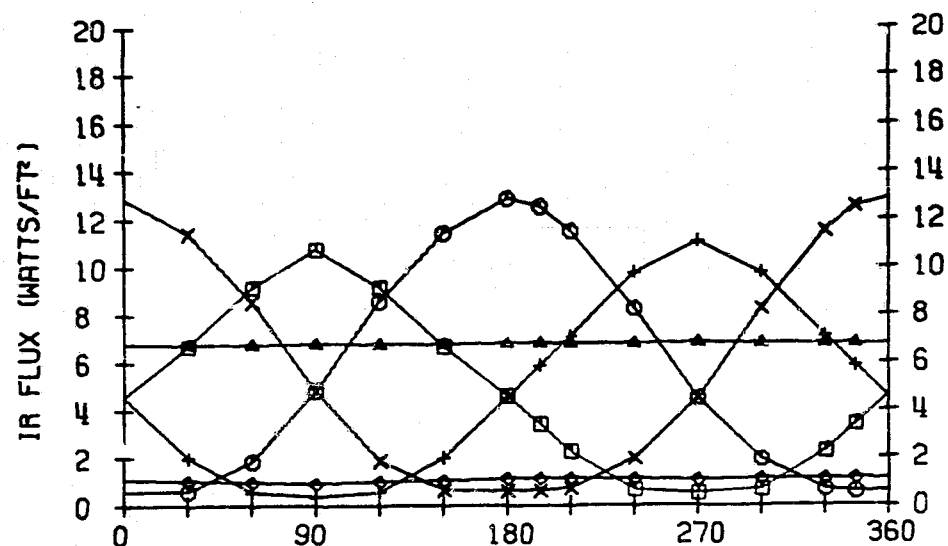


LOCATION 2

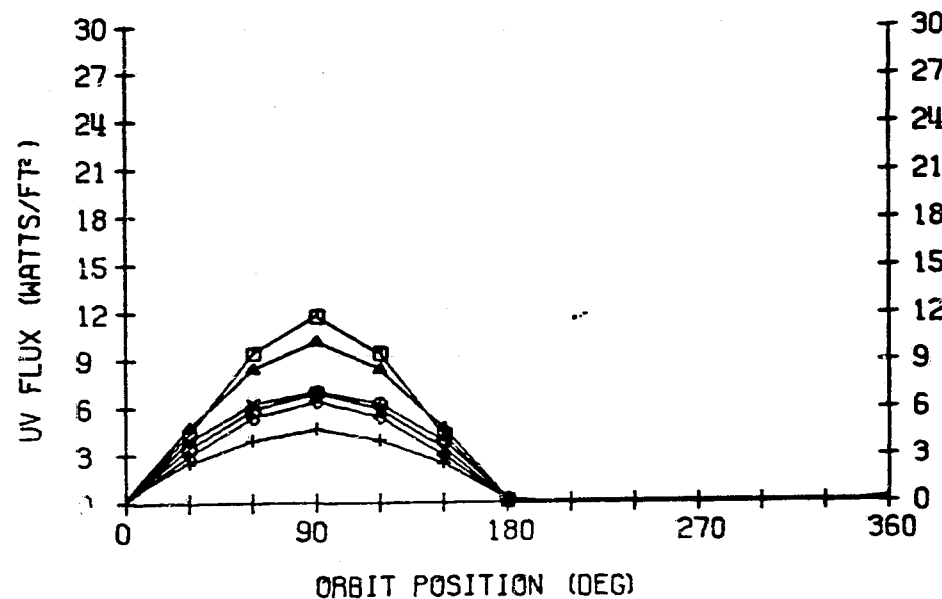
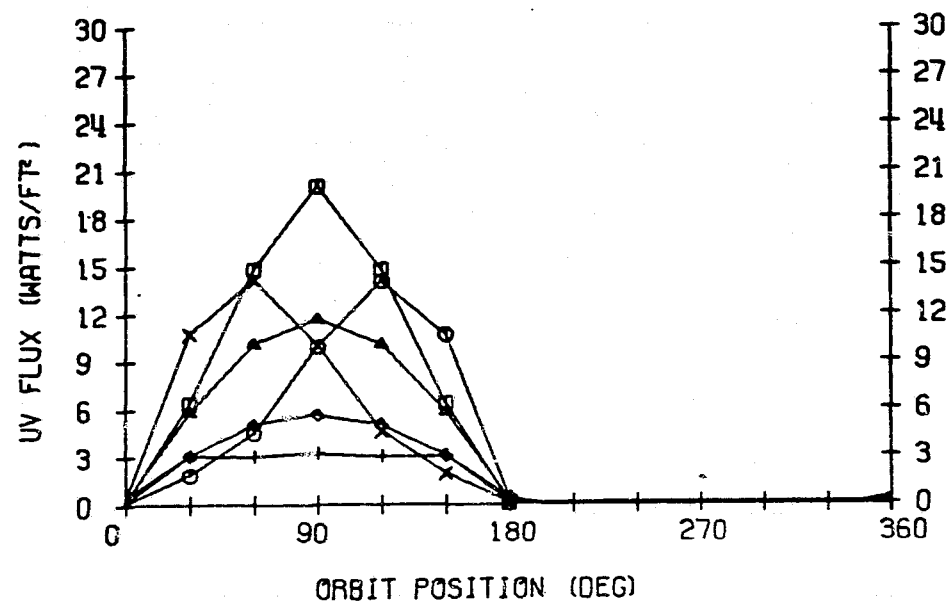
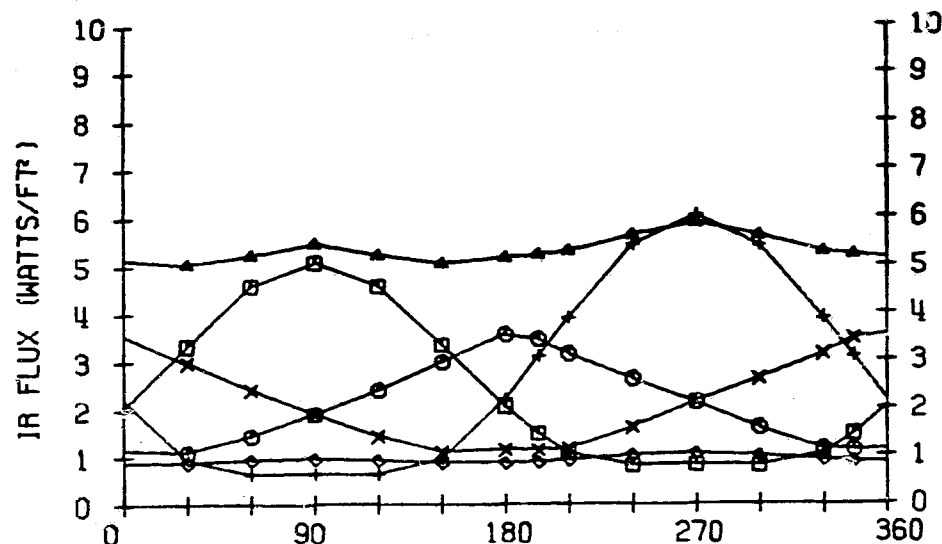


250 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3

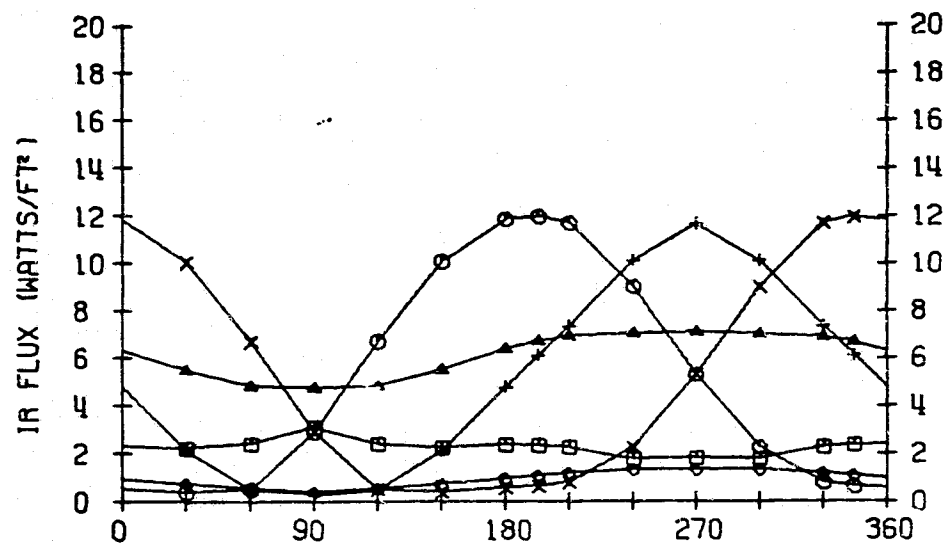


LOCATION 4

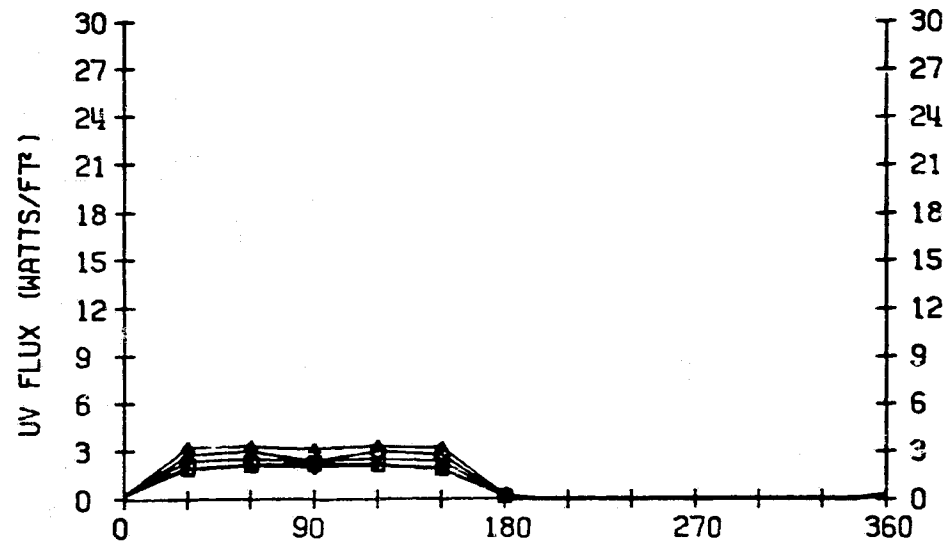
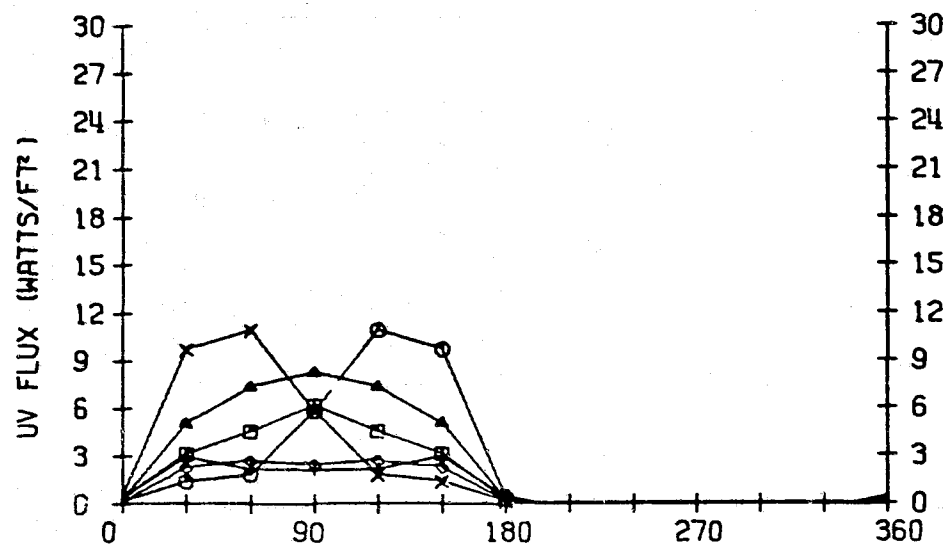
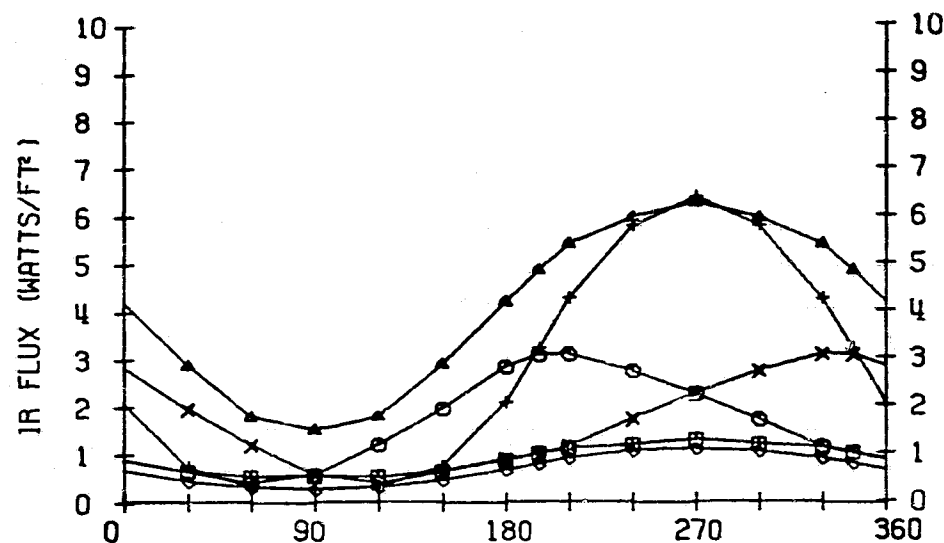


250 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

SURFACE DIRECTION		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	4.5	4.1	3.2	5.5	5.9	7.0
R	+Y (○)	4.7	4.1	2.7	6.2	3.2	6.2
F	+Z (Δ)	0.1	0.1	0.1	1.3	0.8	2.8
L	-X (+)	4.6	4.3	3.7	5.5	3.1	5.1
U	-Y (X)	4.6	3.7	2.8	6.1	3.2	6.2
X	-Z (◇)	7.1	7.7	7.0	7.3	7.0	7.0

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

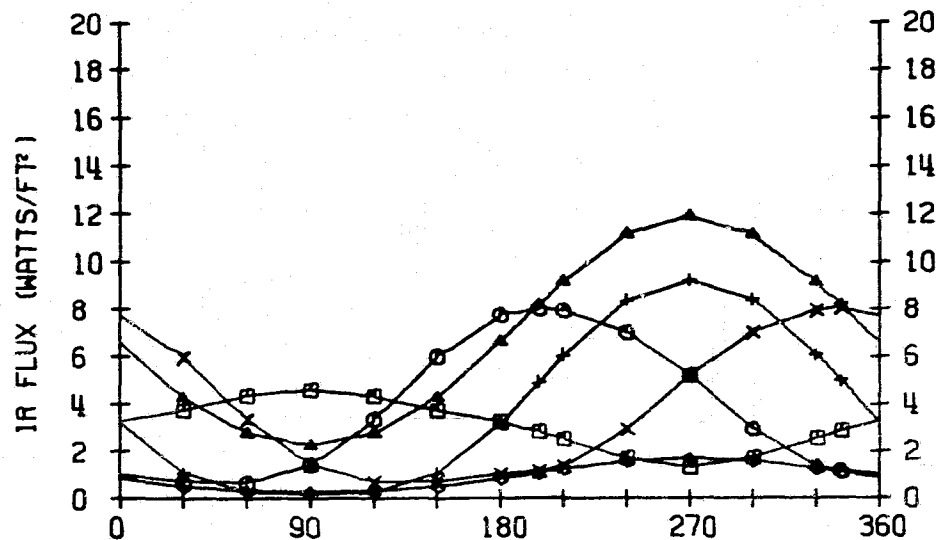
FOR

250 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

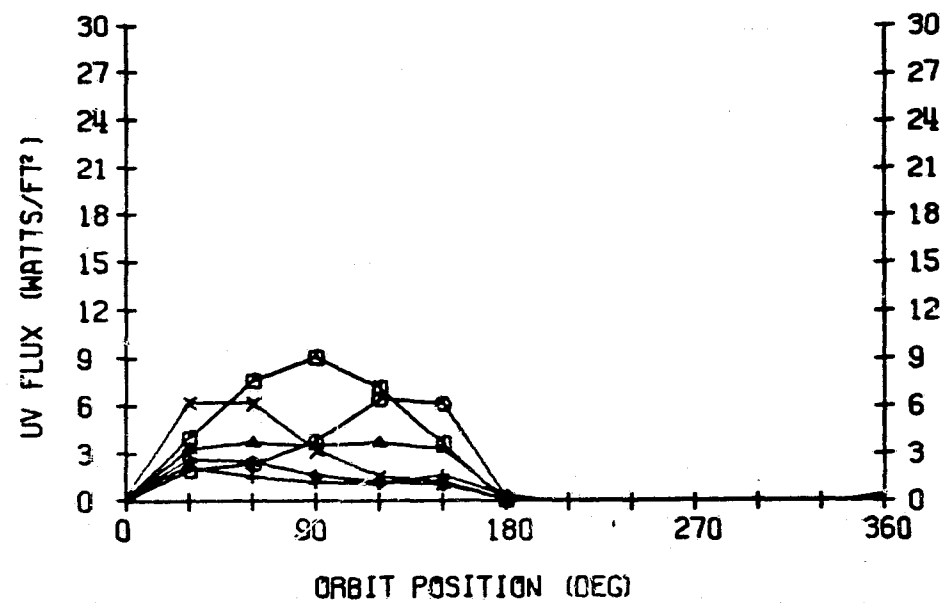
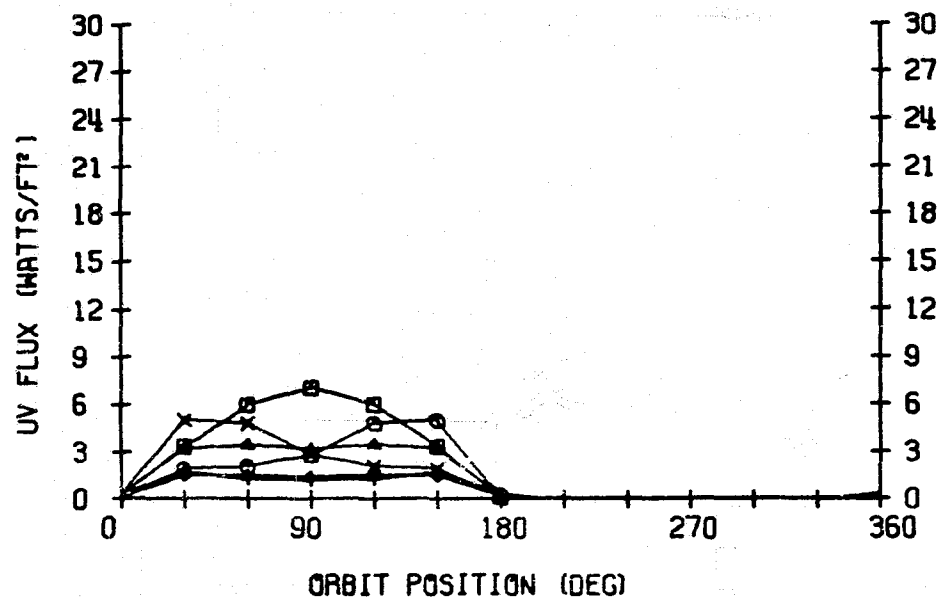
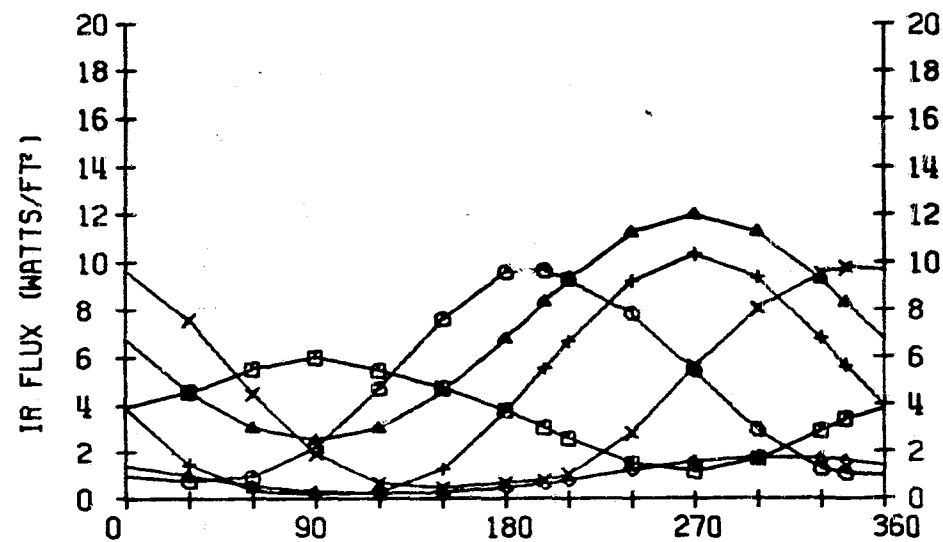
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.6	4.3	2.0	2.0	1.0
R	+Y (○)	3.8	4.5	5.6	2.1	5.2	1.8
F	+Z (△)	6.8	7.0	7.0	5.6	6.5	4.9
L	-X (+)	4.0	4.5	5.2	3.0	5.4	3.1
U	-Y (×)	3.8	4.4	5.6	2.1	5.2	1.8
X	-Z (◇)	0.9	0.9	1.1	1.0	1.0	0.8
U	+X (□)	2.2	2.7	3.1	1.3	0.9	0.3
V	+Y (○)	1.4	1.8	2.2	0.9	1.6	0.4
F	+Z (△)	1.4	1.5	1.5	1.0	0.9	0.4
L	-X (+)	0.7	0.7	0.8	0.6	0.6	0.4
U	-Y (×)	1.4	1.6	2.2	0.9	1.6	0.4
X	-Z (◇)	0.6	0.8	0.8	0.6	0.4	0.2

250 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1

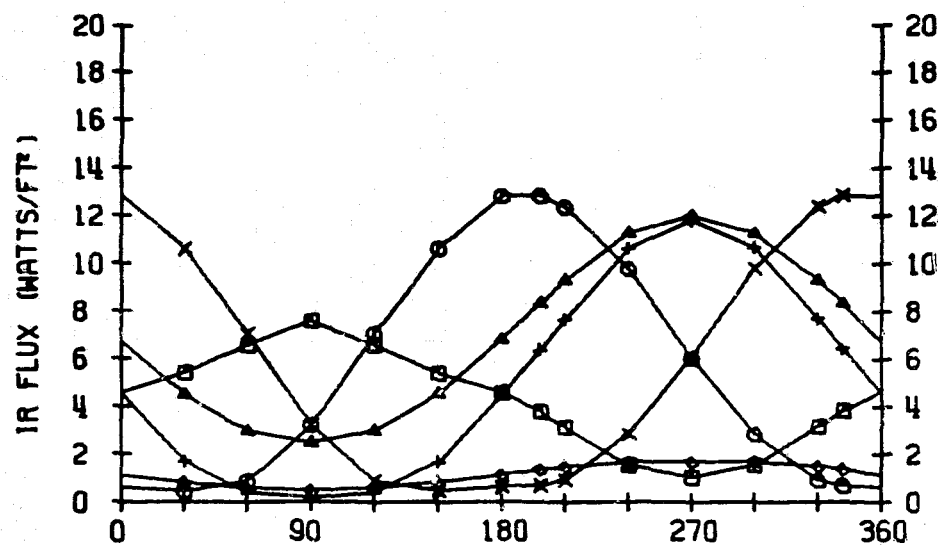


LOCATION 2

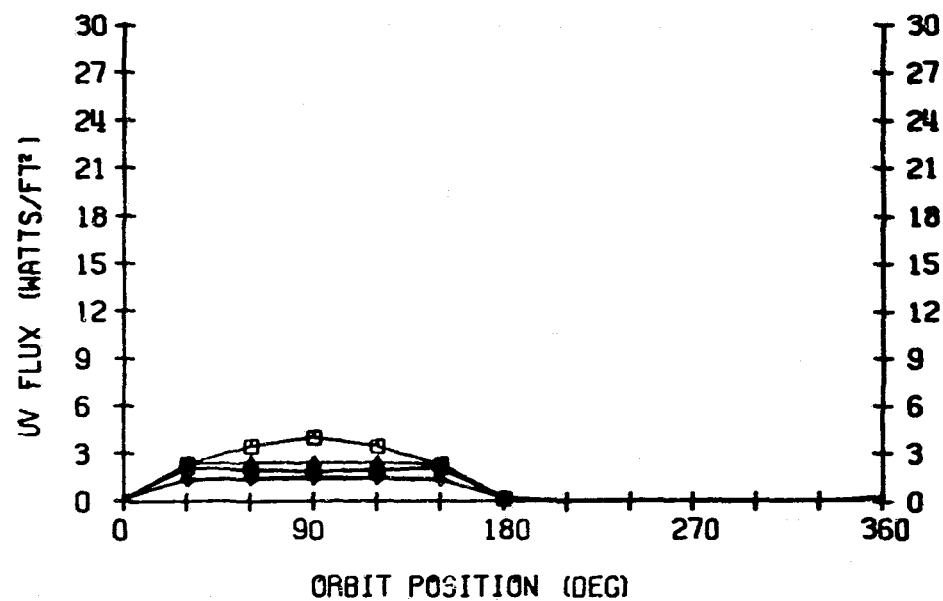
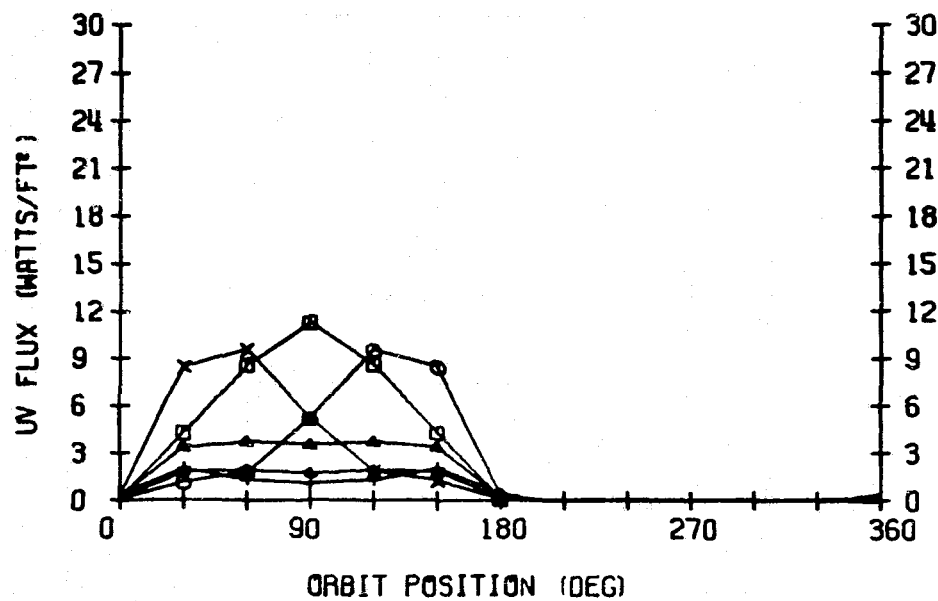
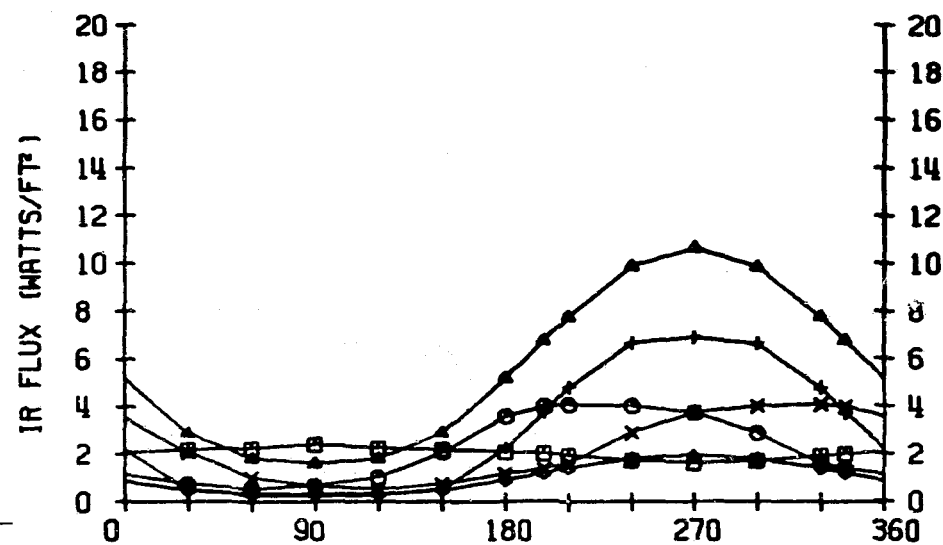


250 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3

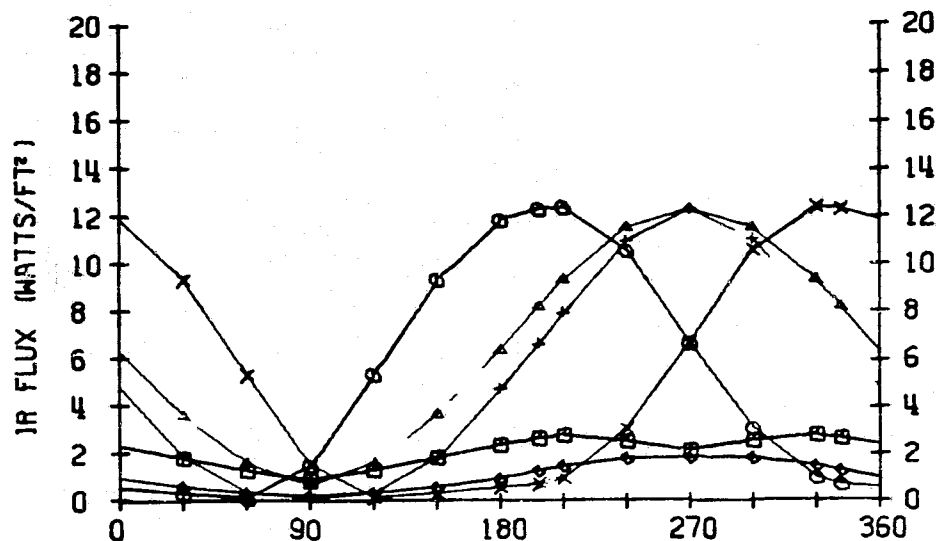


LOCATION 4

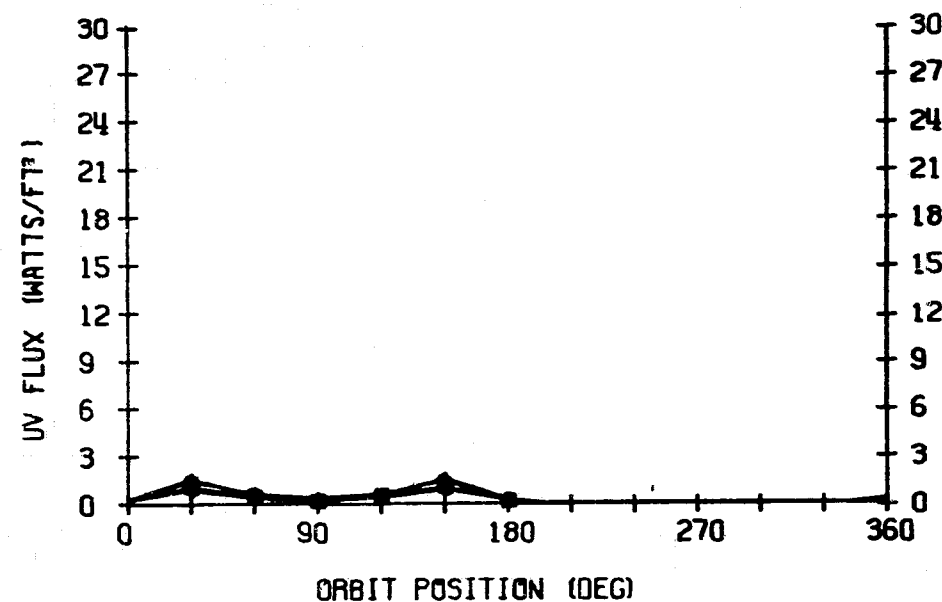
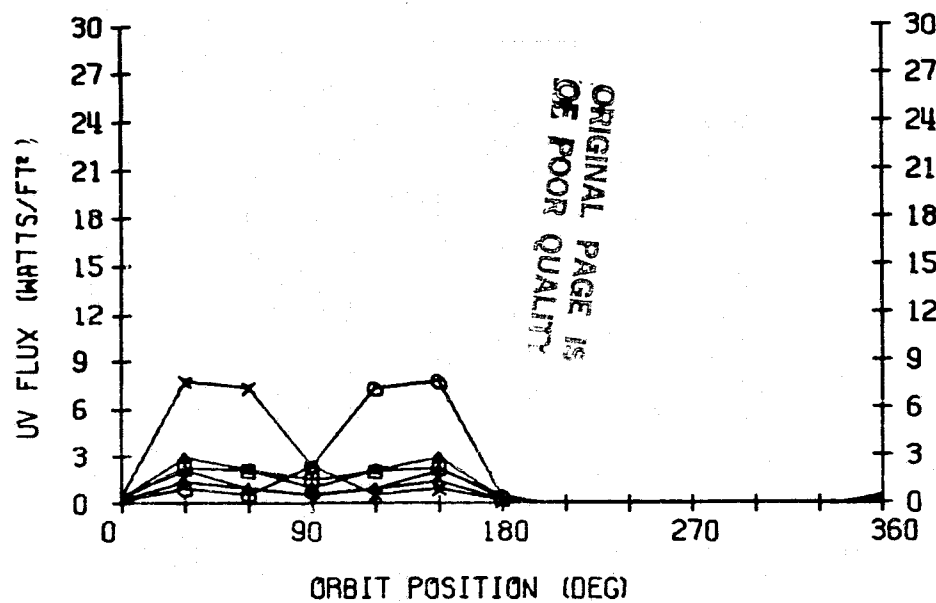
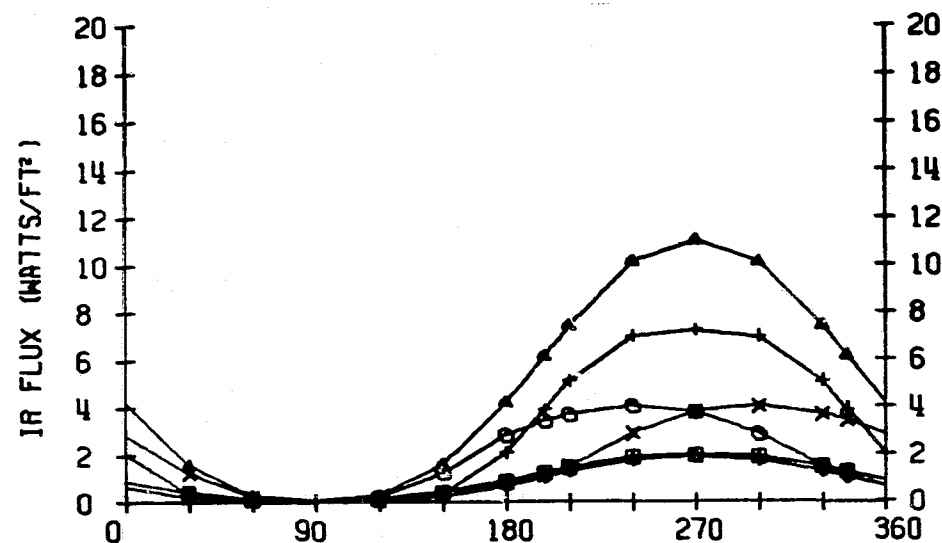


250 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORIGINAL PAGE IS
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ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	4.2	3.8	3.0	5.1	5.8	7.1
R	+Y (○)	4.2	3.7	2.4	5.6	3.1	6.2
F	+Z (Δ)	0.1	0.1	0.1	1.2	0.7	2.7
L	-X (+)	4.0	3.8	3.2	4.9	2.9	5.0
U	-Y (X)	4.2	3.3	2.5	5.5	3.1	6.2
X	-Z (◇)	6.4	7.0	6.3	6.6	7.0	7.2

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

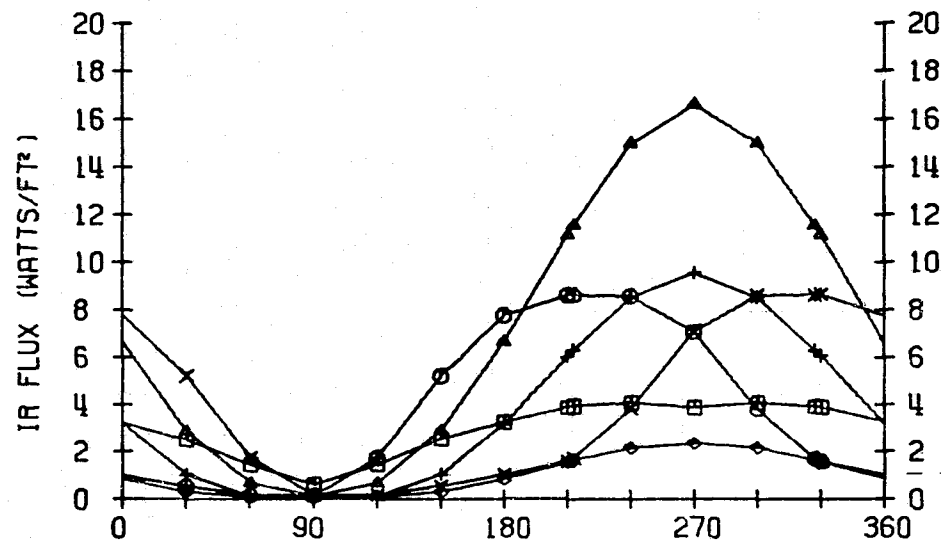
FOR

250 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

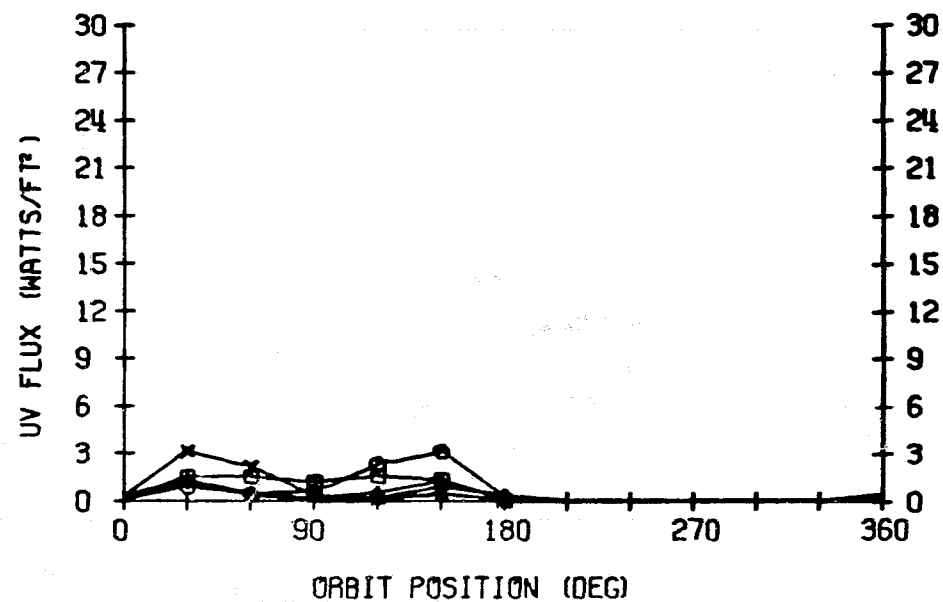
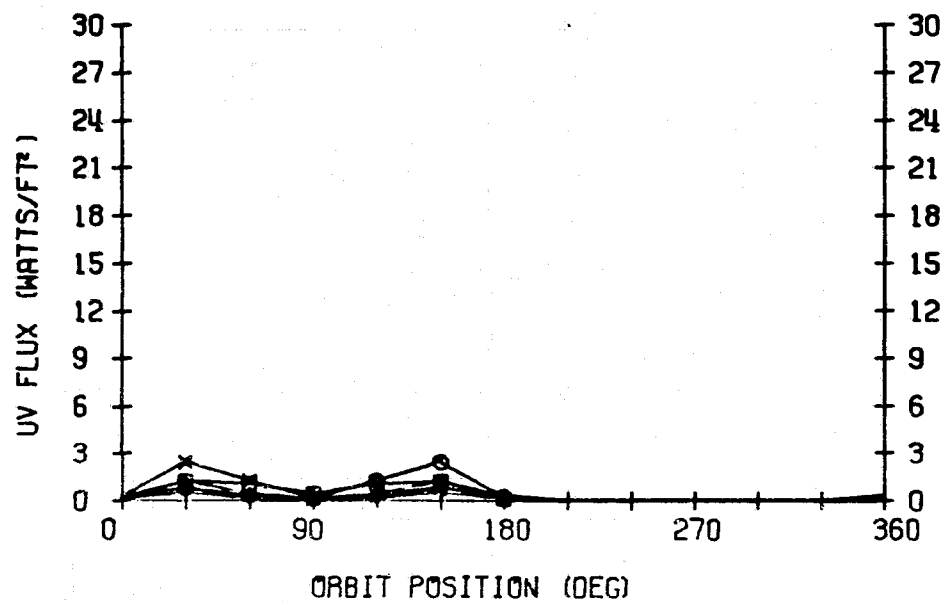
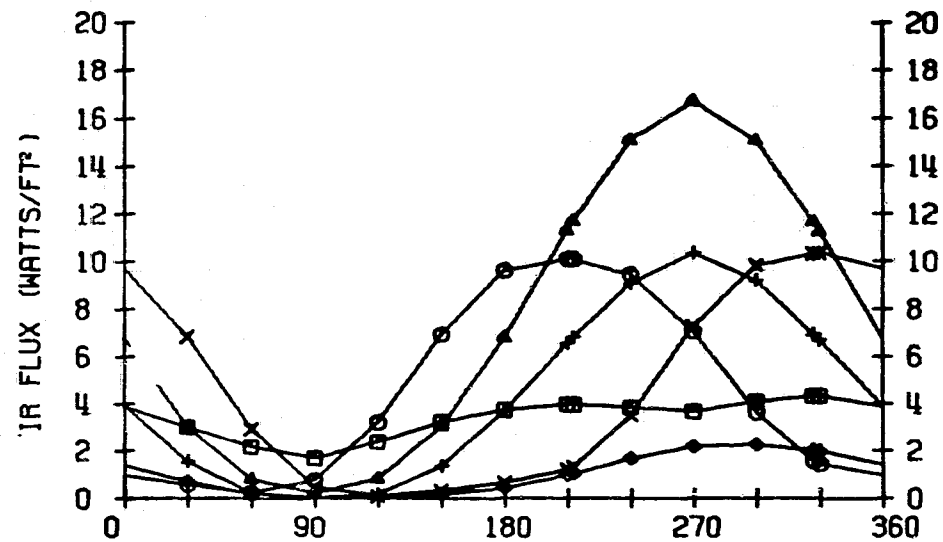
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.9	3.3	3.9	2.0	2.3	1.1
R	+Y (○)	3.8	4.5	5.6	2.3	5.3	1.9
F	+Z (Δ)	7.4	7.6	7.6	6.3	7.3	5.4
L	-X (+)	3.9	4.4	5.0	3.0	5.2	3.1
U	-Y (x)	3.8	4.4	5.6	2.3	5.3	1.9
X	-Z (◇)	1.0	1.0	1.2	1.1	1.0	0.9
U	+X (□)	0.4	0.6	0.8	0.2	0.4	0.1
V	+Y (○)	0.4	0.7	0.9	0.2	0.3	0.2
F	+Z (Δ)	0.3	0.3	0.3	0.2	0.3	0.2
L	-X (+)	0.2	0.3	0.4	0.2	0.4	0.1
U	-Y (x)	0.4	0.6	0.9	0.2	0.3	0.2
X	-Z (◇)	0.1	0.2	0.2	0.1	0.2	0.1

250 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1

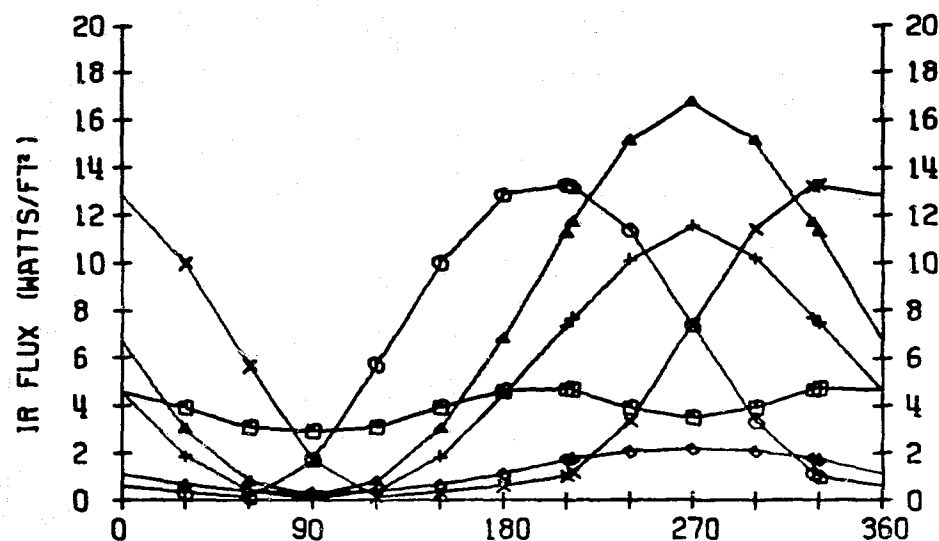


LOCATION 2

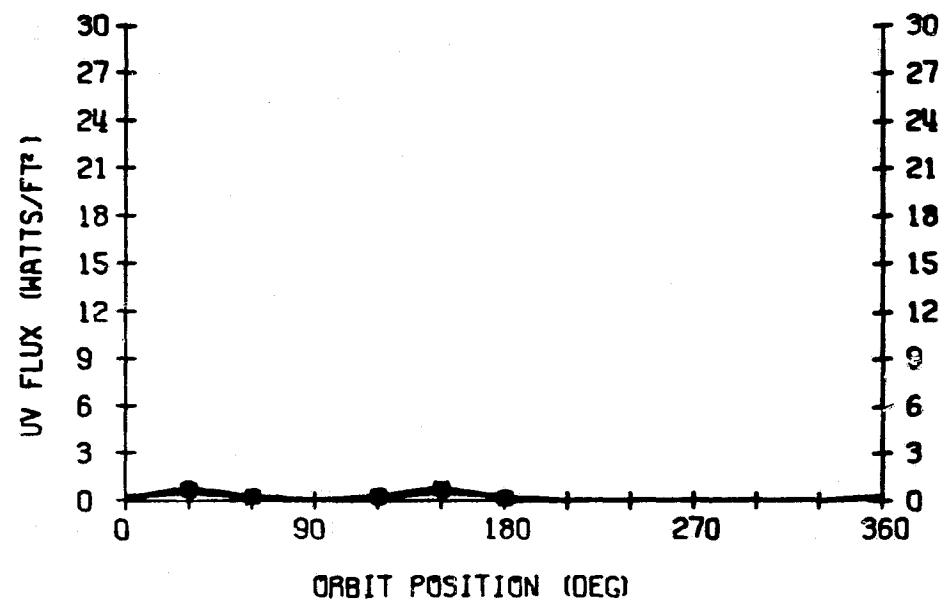
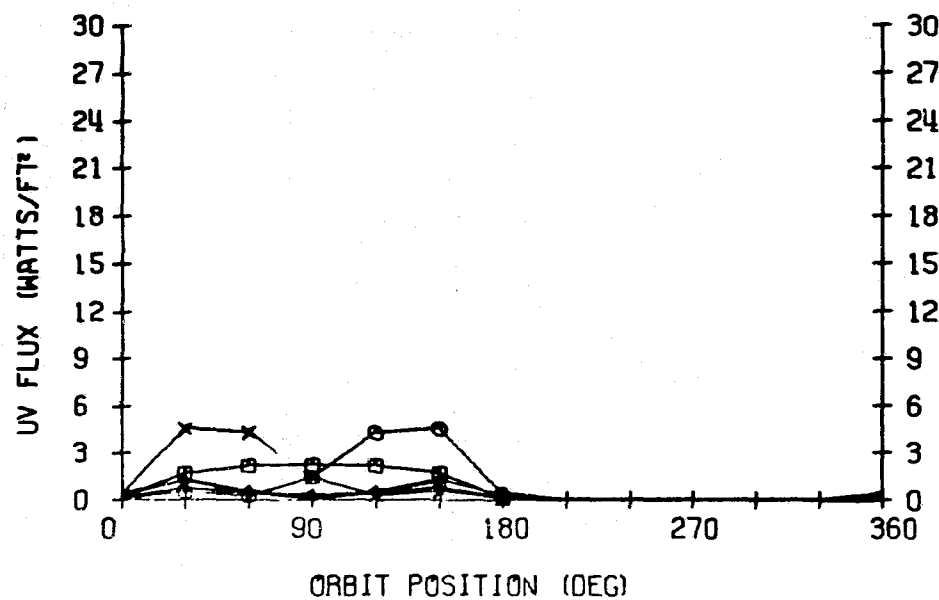
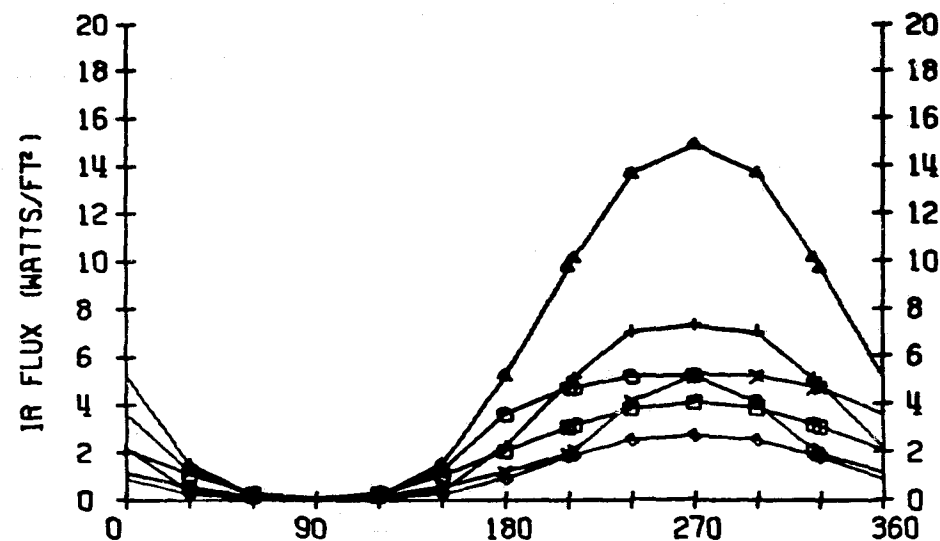


250 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3

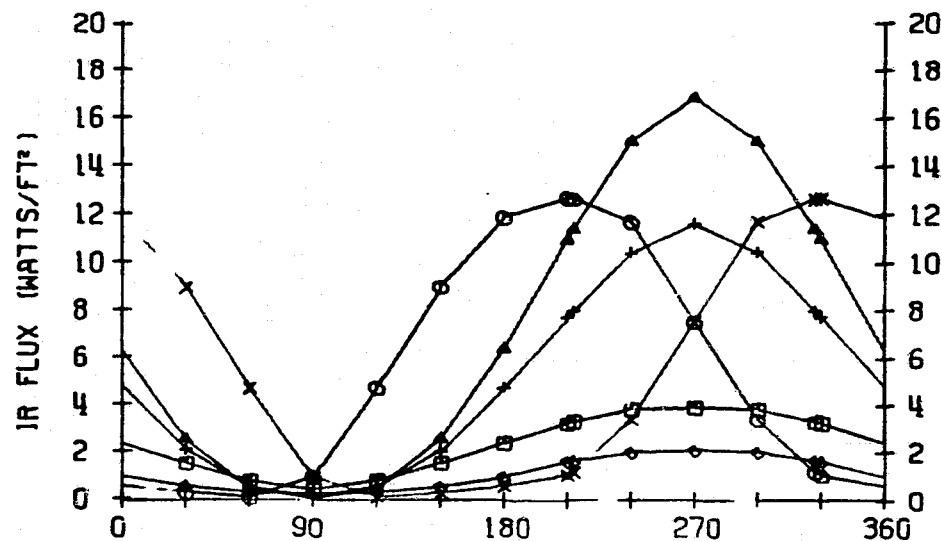


LOCATION 4

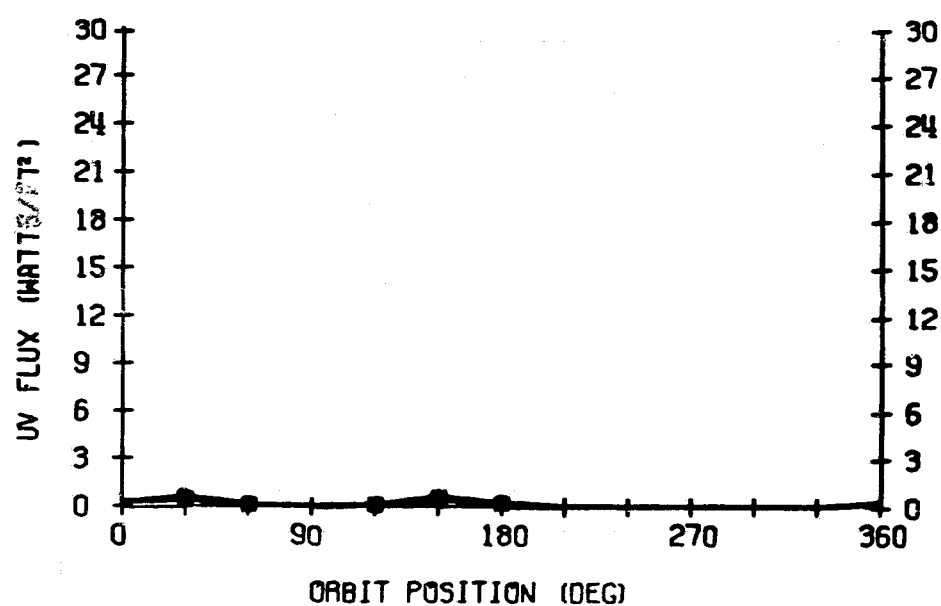
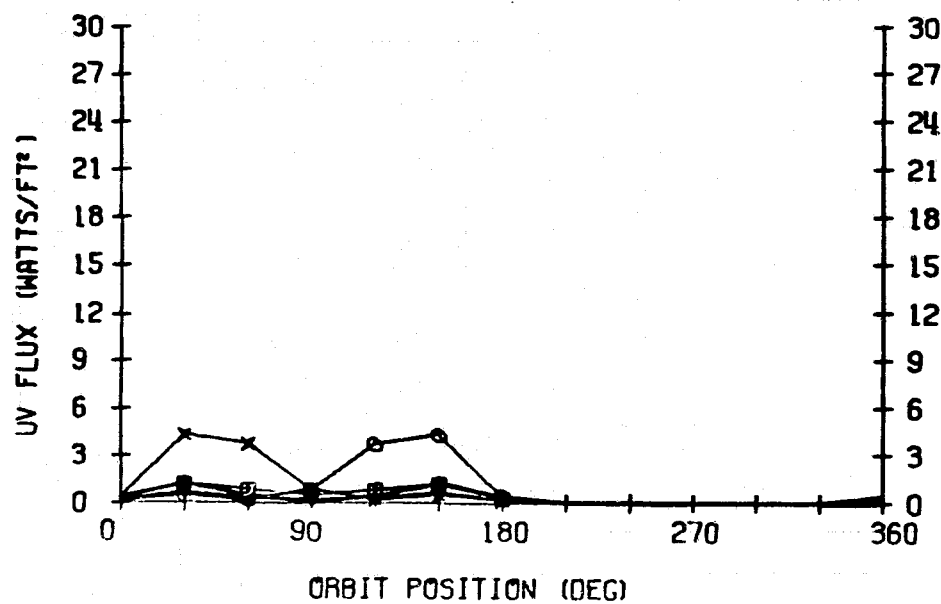
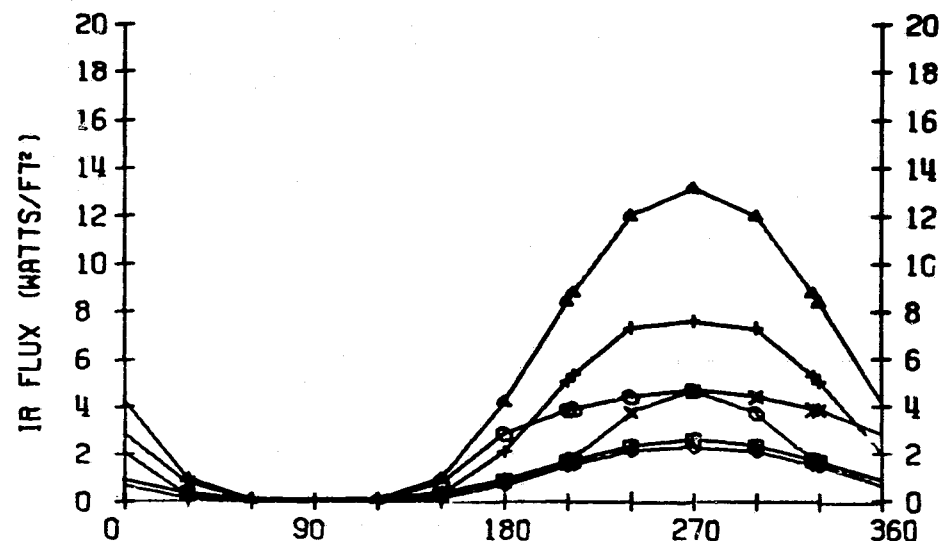


250 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	4.3	3.9	3.1	5.2	5.3	7.2
R	+Y (○)	4.2	3.6	2.4	5.6	3.1	6.4
F	+Z (△)	0.1	0.1	0.1	1.2	0.7	2.7
L	-X (+)	4.0	3.7	3.2	4.9	2.9	5.2
U	-Y (X)	4.2	3.4	2.5	5.6	3.1	6.4
X	-Z (◇)	6.5	7.0	6.4	6.9	7.1	7.6

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

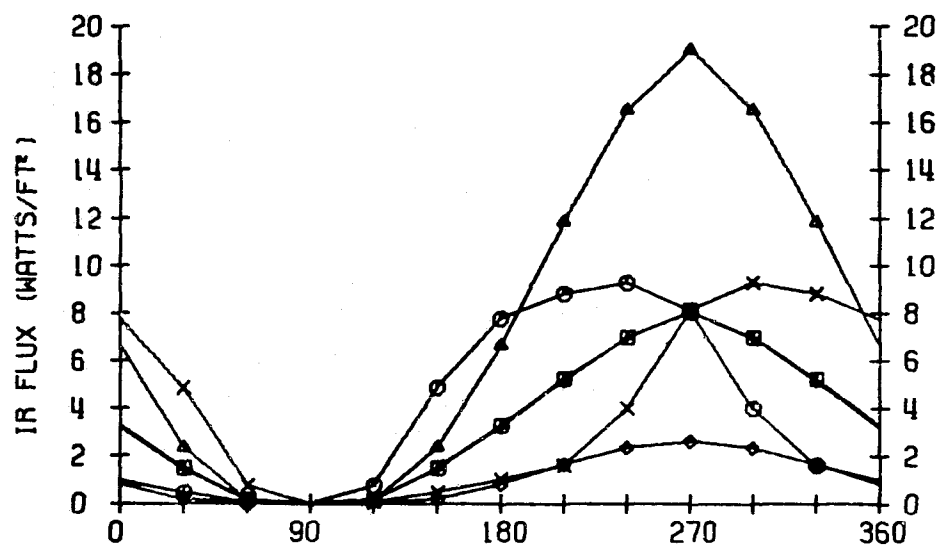
FOR

250 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

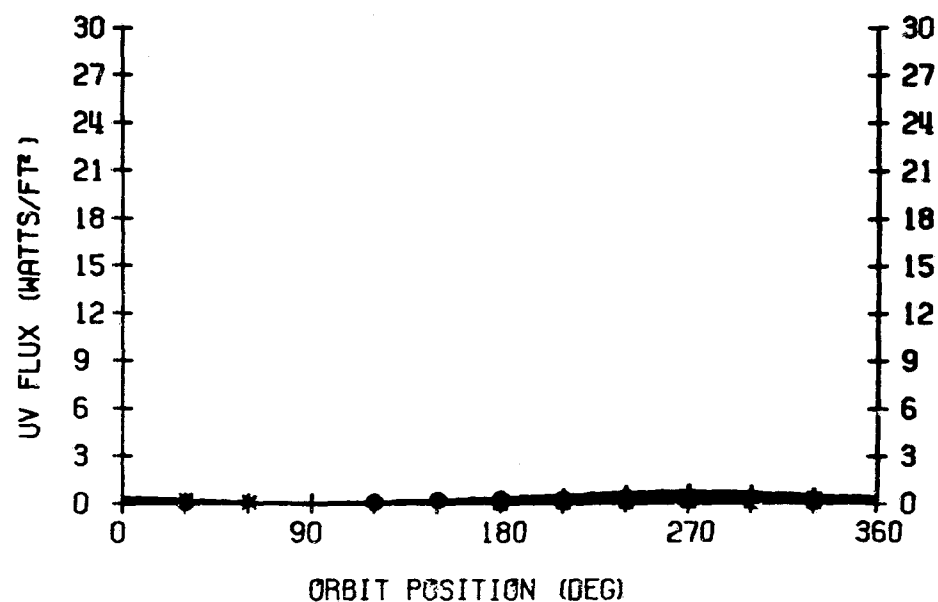
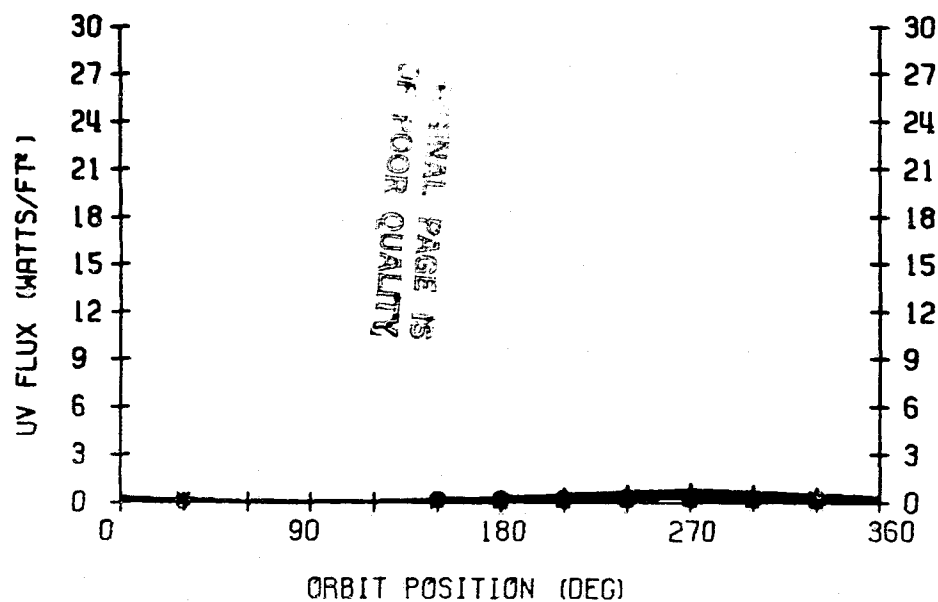
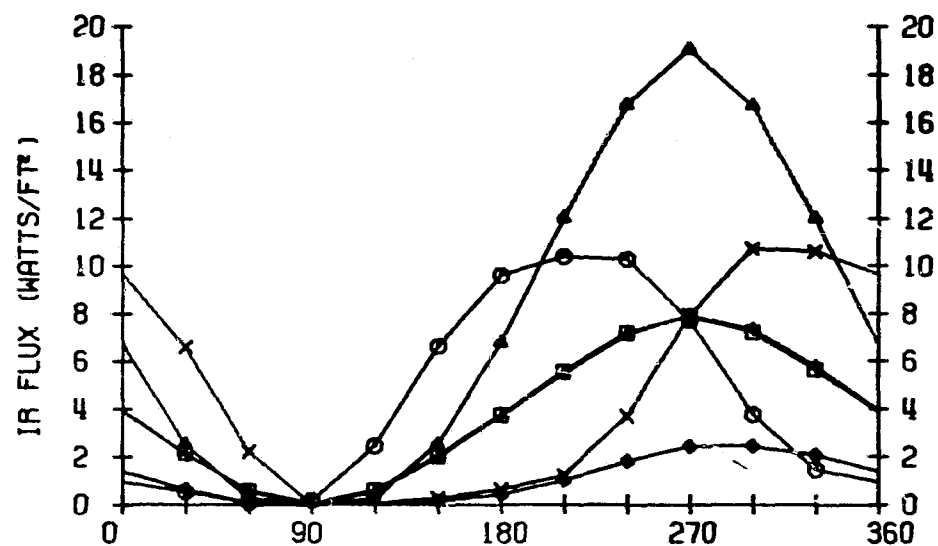
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.5	3.9	4.5	2.7	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.4	5.2	1.9
F	+Z (Δ)	7.8	8.0	8.0	6.7	7.4	5.2
L	-X (+)	3.5	3.9	4.3	2.8	4.5	2.7
U	-Y (X)	3.9	4.5	5.6	2.4	5.2	1.9
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.9
U	+X (□)	0.1	0.1	0.1	0.1	0.3	0.2
V	+Y (○)	0.2	0.2	0.2	0.2	0.3	0.2
F	+Z (Δ)	0.2	0.2	0.2	0.2	0.3	0.3
L	-X (+)	0.4	0.4	0.4	0.3	0.5	0.3
U	-Y (X)	0.2	0.2	0.2	0.2	0.3	0.2
X	-Z (◇)	0.1	0.1	0.1	0.1	0.2	0.2

250 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1



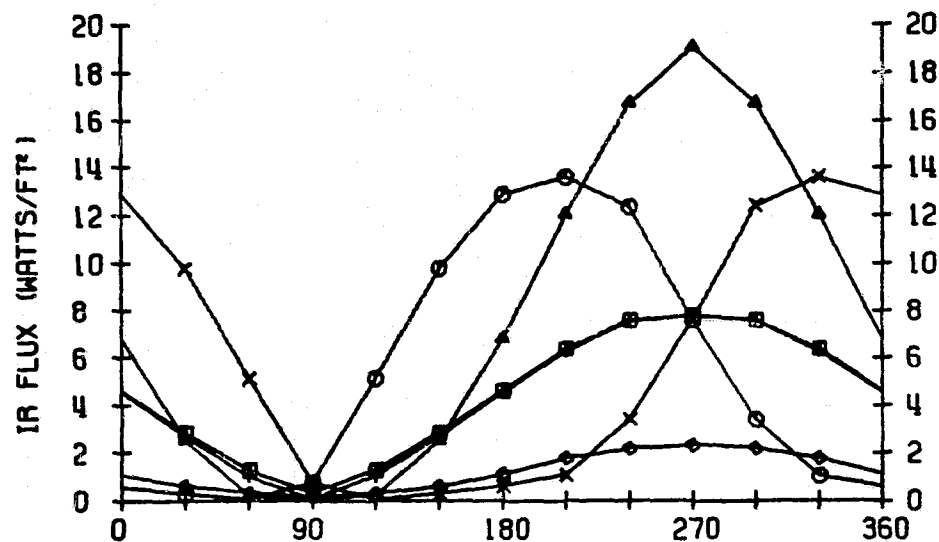
LOCATION 2



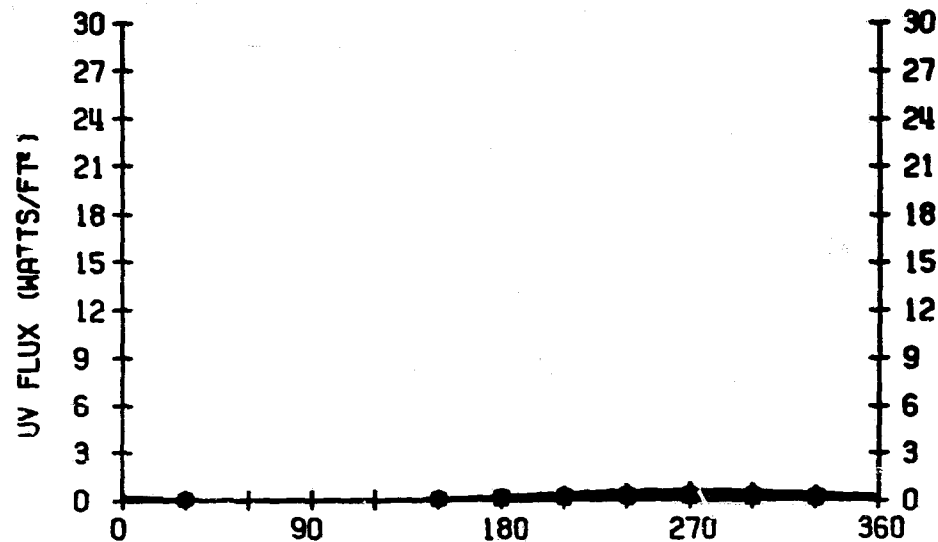
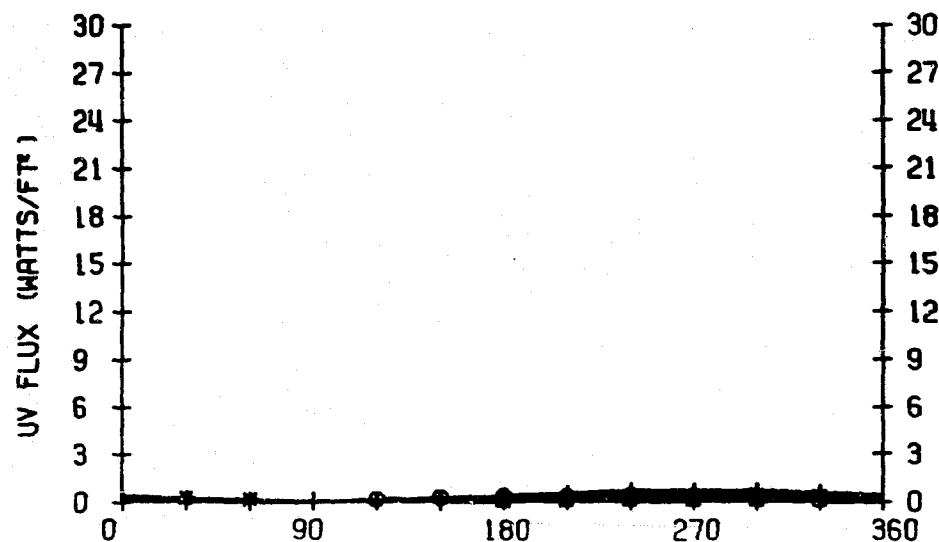
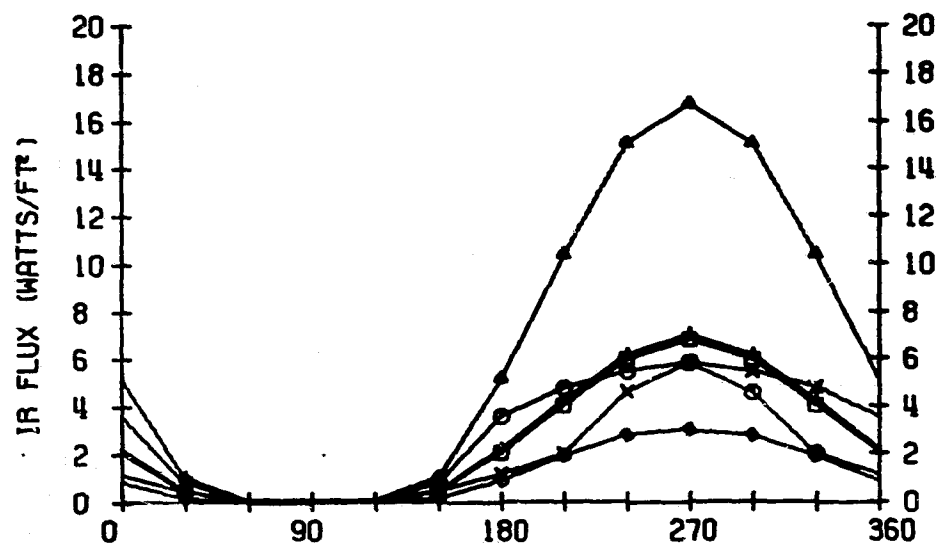
ORIGINAL PAGE IS
OF POOR QUALITY

250 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3



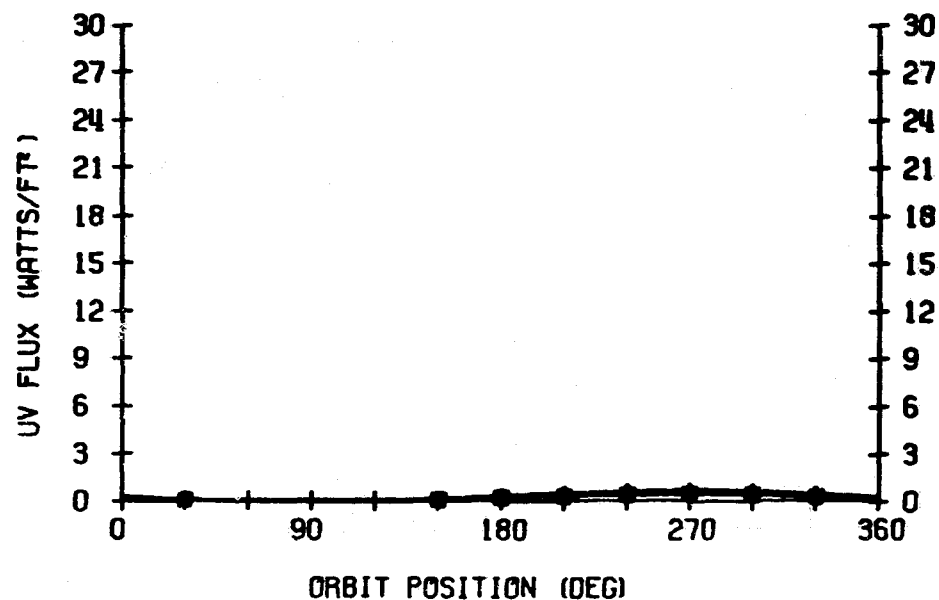
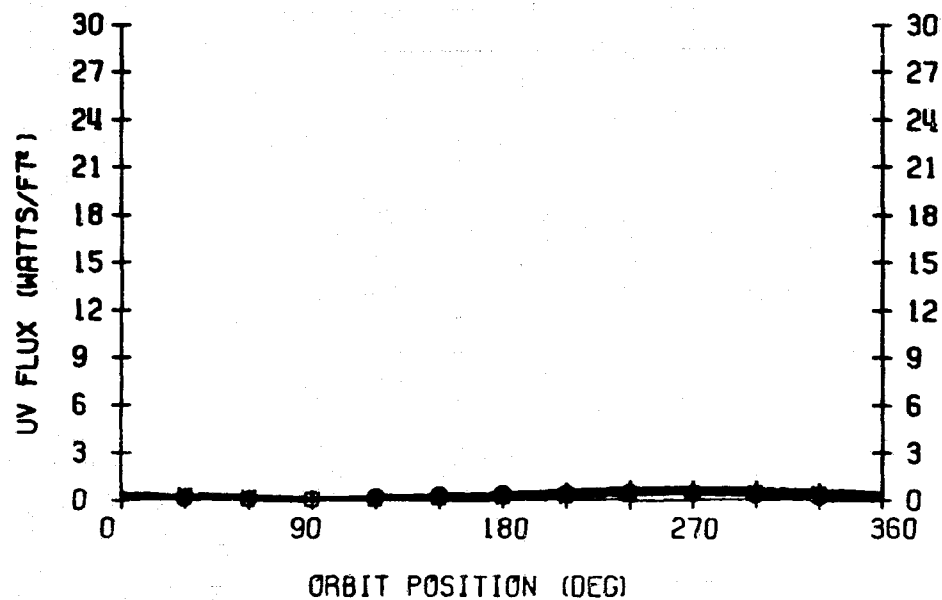
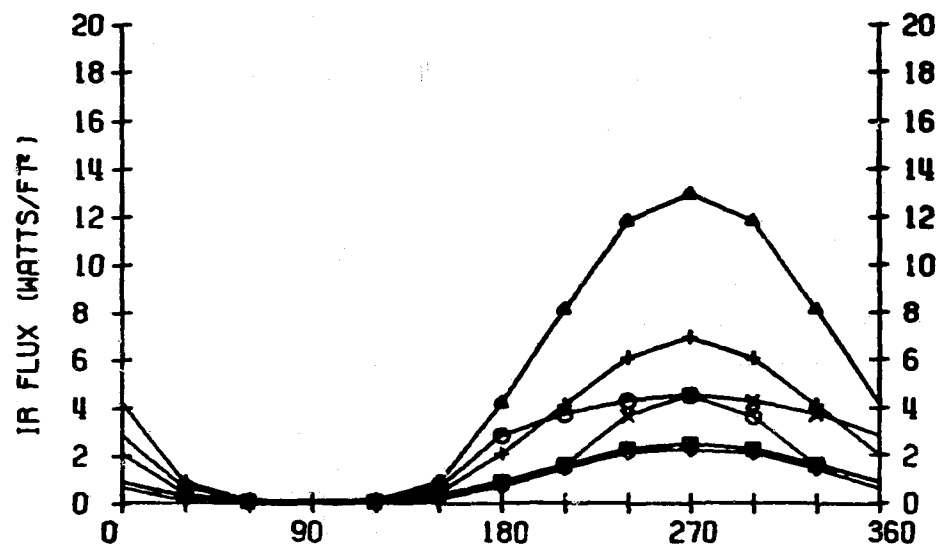
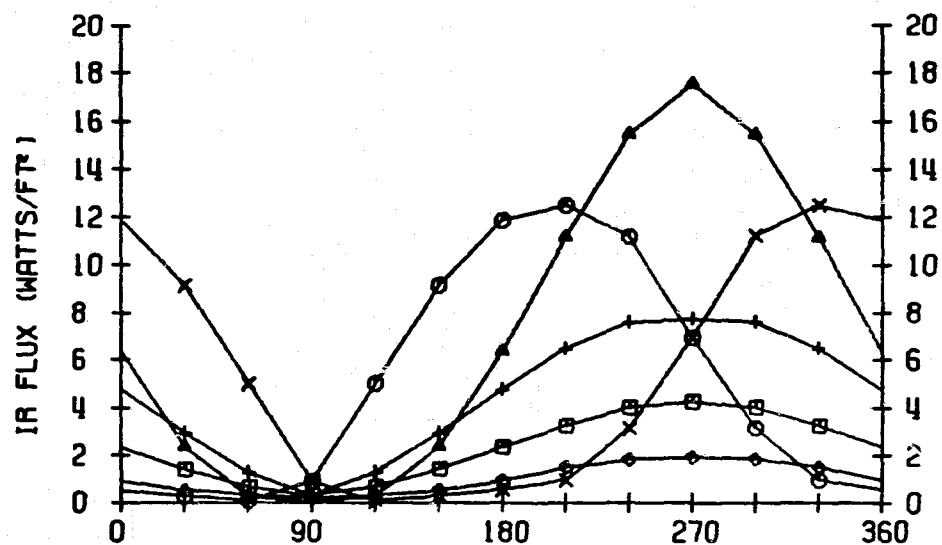
LOCATION 4



250 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5

LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (■)	4.3	3.9	3.1	5.4	5.5	6.9
R	+Y (●)	4.3	3.7	2.5	5.9	3.0	6.2
F	+Z (△)	0.1	0.1	0.1	1.2	0.7	2.6
L	-X (†)	4.1	3.3	3.3	5.1	3.0	5.2
U	-Y (×)	4.3	3.5	2.6	5.8	3.0	6.2
X	-Z (◇)	6.9	7.2	6.6	7.3	7.0	7.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

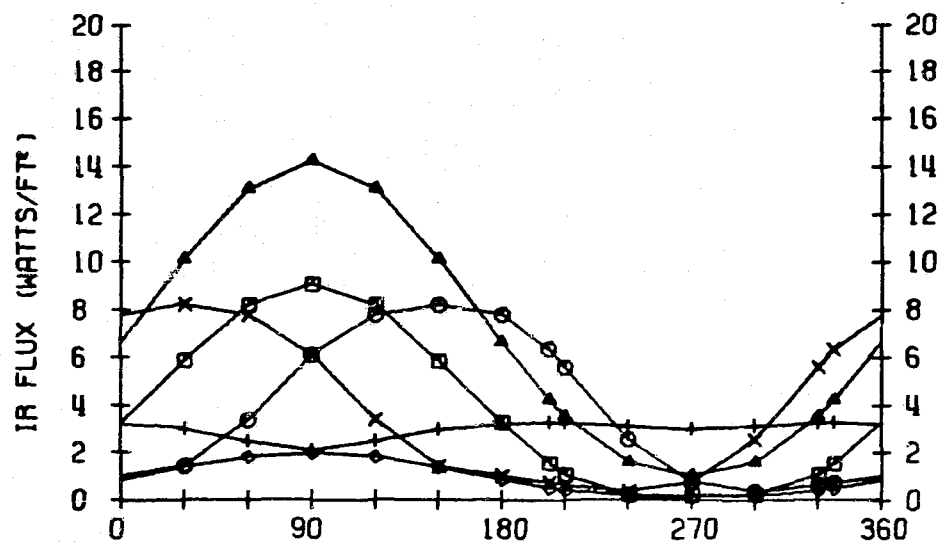
FOR

250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

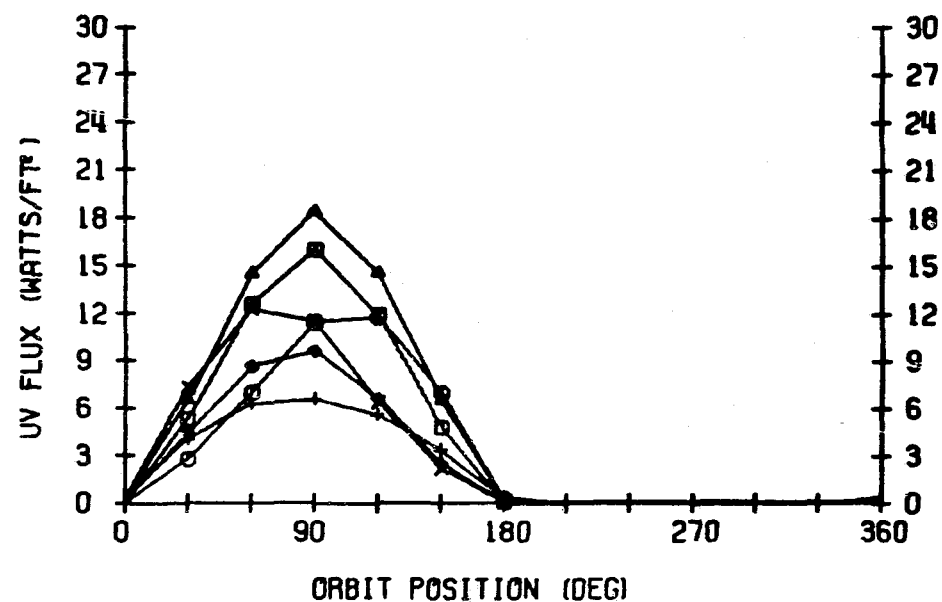
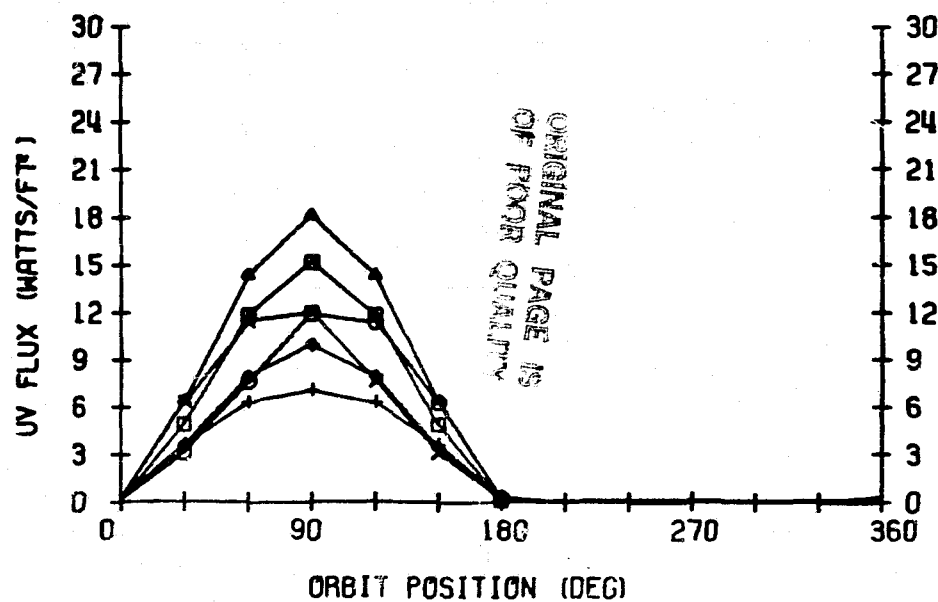
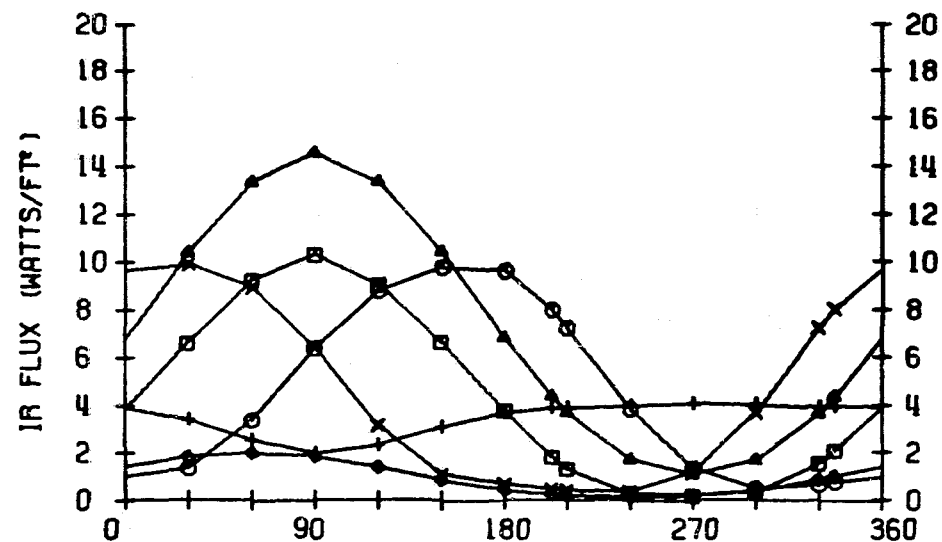
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.9	4.4	5.0	2.7	2.3	0.9
R	+Y (○)	3.8	4.5	5.6	2.2	5.1	1.6
F	+Z (Δ)	7.1	7.3	7.3	5.9	6.5	4.3
L	-X (+)	2.9	3.4	4.1	2.1	4.3	2.1
U	-Y (x)	3.8	4.4	5.6	2.2	5.1	1.6
X	-Z (◇)	0.9	0.9	1.1	1.0	0.9	0.7
U	+X (□)	4.1	4.2	4.3	3.7	2.2	1.9
V	+Y (○)	3.4	3.4	3.4	3.2	2.8	2.4
F	+Z (Δ)	5.0	5.1	5.1	4.7	4.5	3.5
L	-X (+)	2.3	2.2	2.2	2.5	2.0	2.2
U	-Y (x)	3.4	3.3	3.5	3.2	2.8	2.4
X	-Z (◇)	2.7	2.7	2.6	3.0	2.0	2.2

250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1

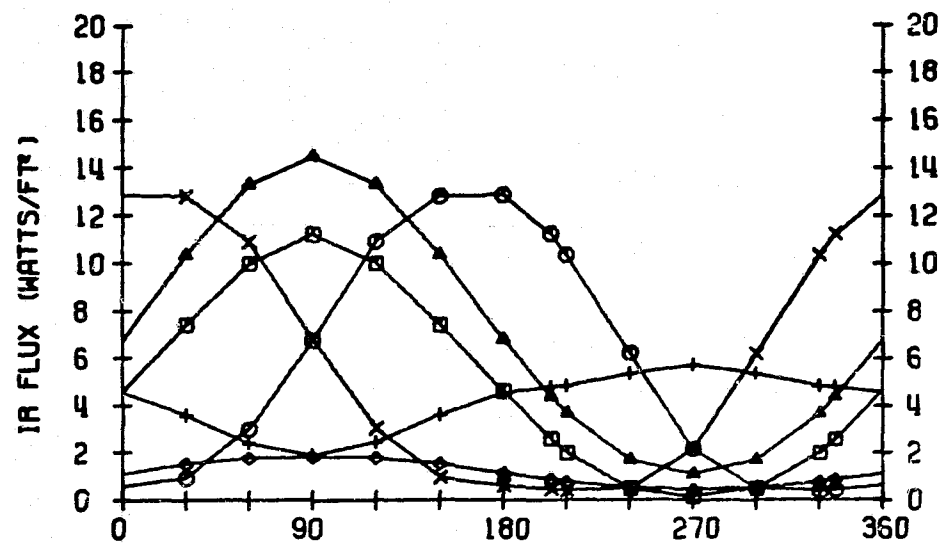


LOCATION 2

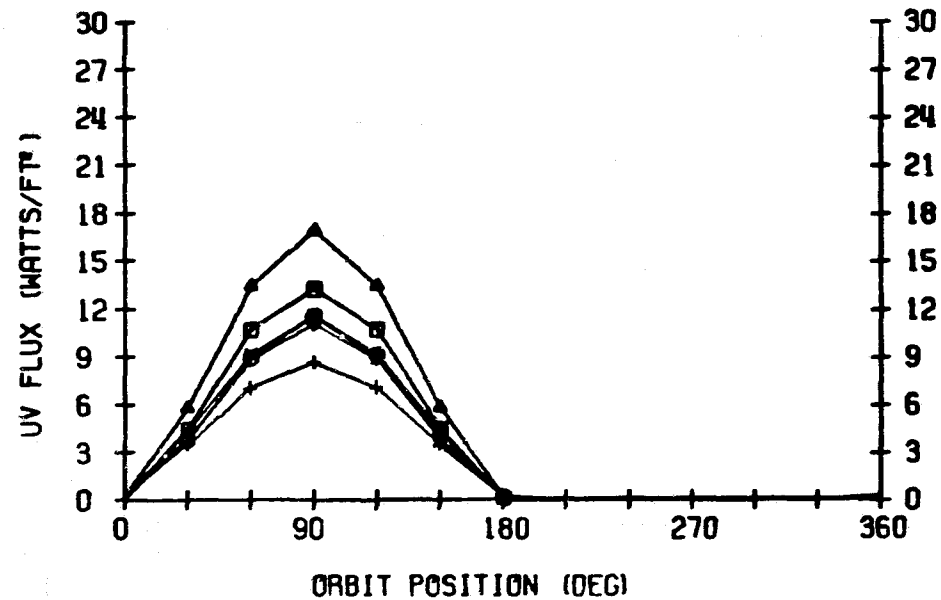
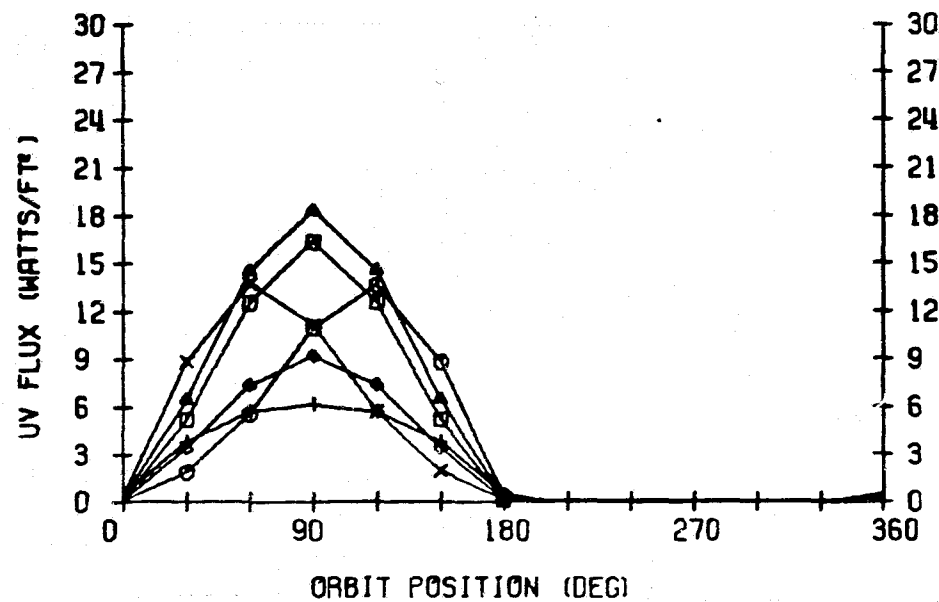
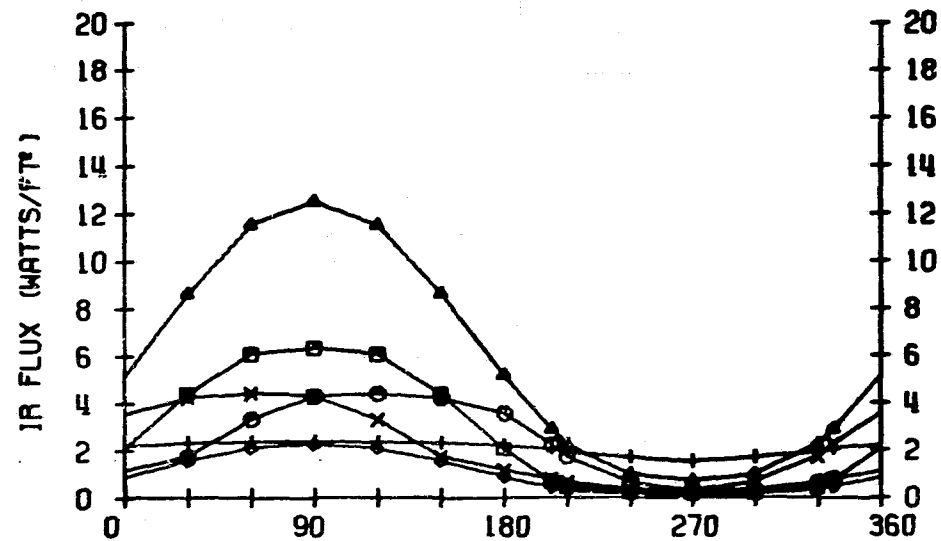


250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3

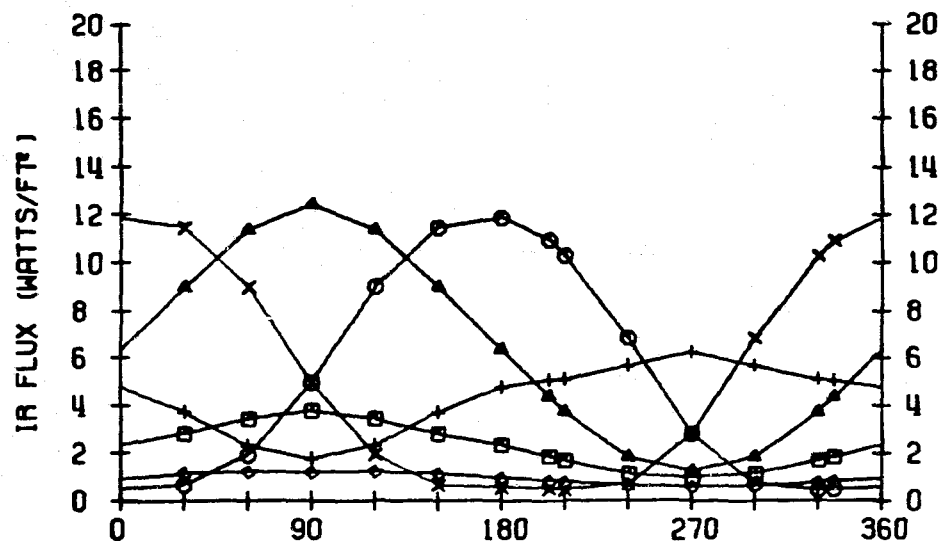


LOCATION 4

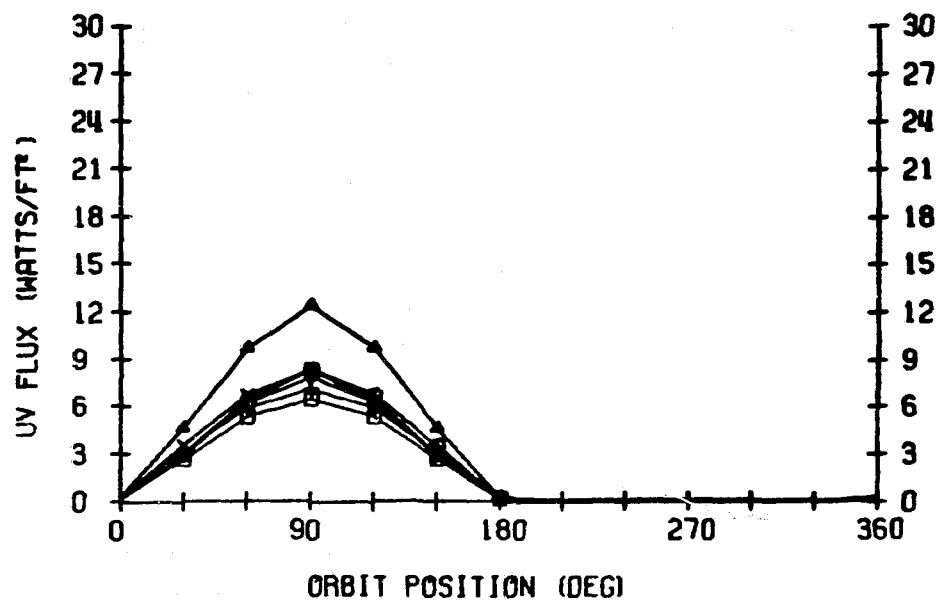
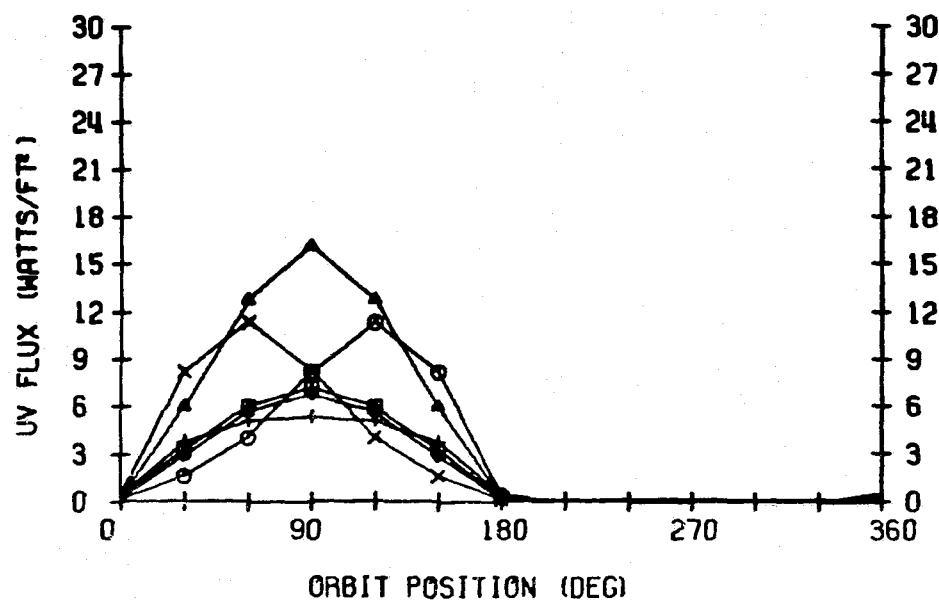
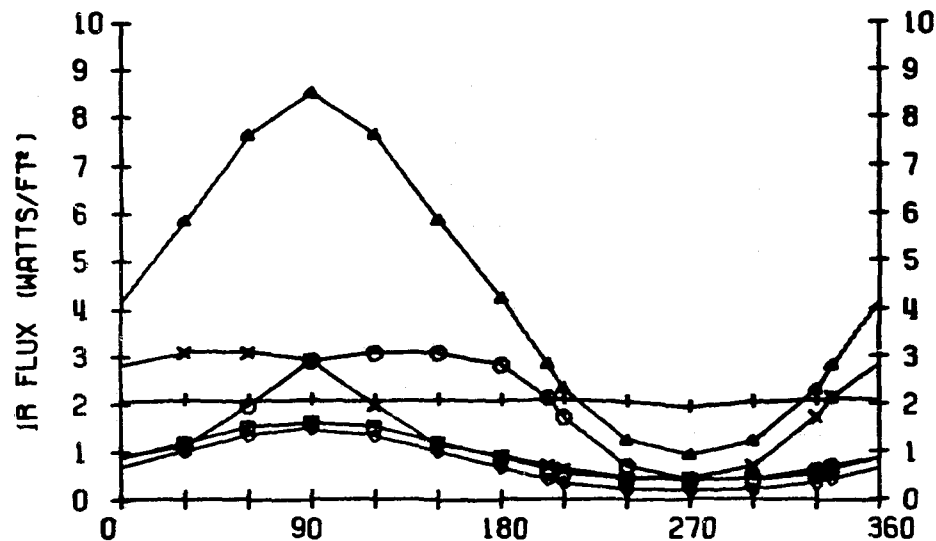


250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	5.1	4.6	3.6	6.3	6.1	7.6
R	+Y (○)	5.3	4.5	3.0	7.1	3.4	6.9
F	+Z (△)	0.1	0.1	0.1	1.5	0.8	2.9
L	-X (+)	5.2	4.8	4.2	6.3	3.5	5.9
U	-Y (X)	5.2	4.2	3.1	7.0	3.4	6.9
X	-Z (◇)	8.2	8.7	8.0	8.6	7.8	8.1

FLUX DATA
FOR
ALTITUDE - 250 km
ORIENTATION NO. 2

Nose down 45° to sun

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

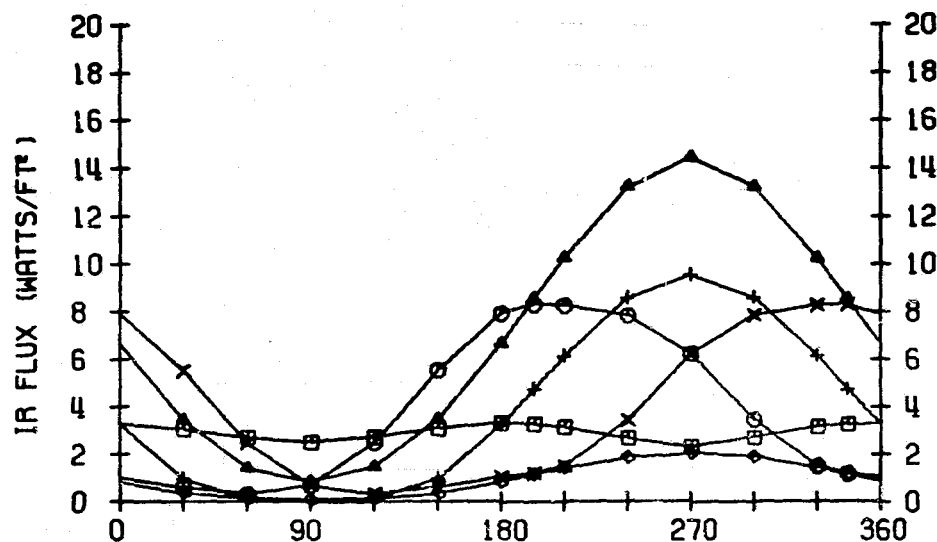
FCR

250 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

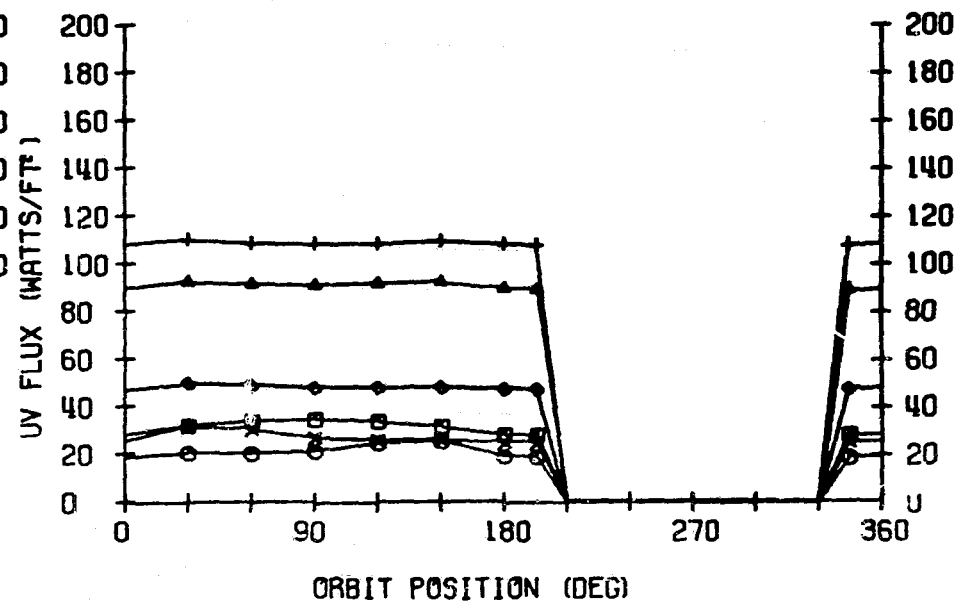
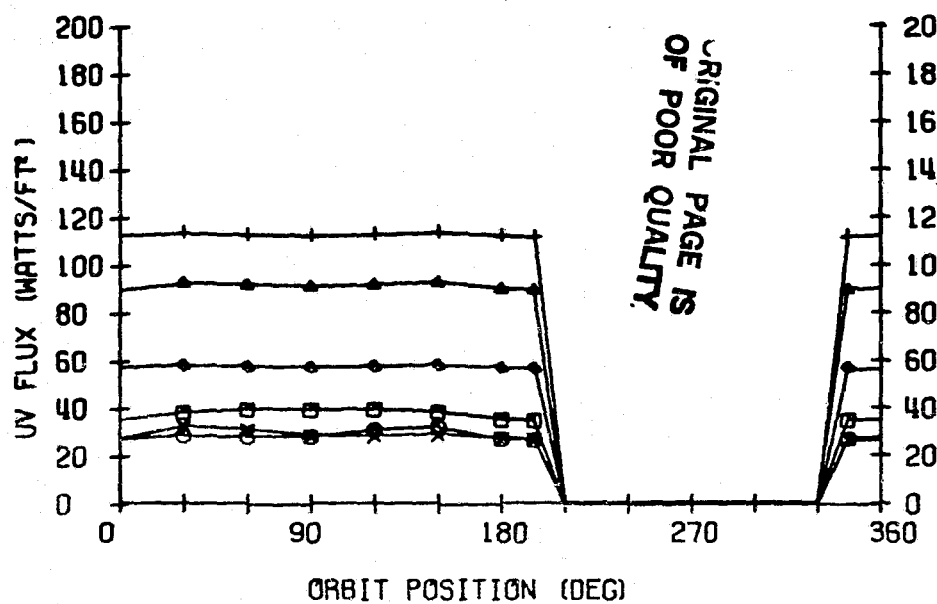
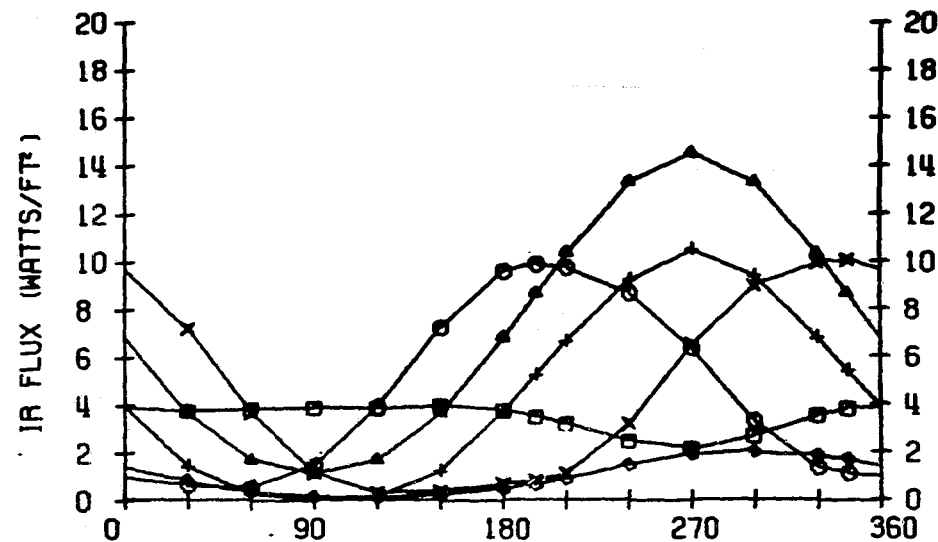
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.9	3.4	4.0	1.9	2.1	1.0
R	+Y (○)	3.8	4.5	5.6	2.2	5.3	1.9
F	+Z (△)	7.1	7.3	7.3	5.9	6.9	5.2
L	-X (+)	4.0	4.5	5.1	3.0	5.3	3.1
U	-Y (X)	3.8	4.4	5.6	2.2	5.3	1.9
X	-Z (◇)	0.9	0.9	1.1	1.0	1.0	0.9
U	+X (□)	22.0	18.6	17.5	27.7	36.0	45.4
V	+Y (○)	16.7	12.4	11.4	25.8	17.2	34.9
F	+Z (△)	53.4	53.3	53.2	56.2	57.1	66.8
L	-X (+)	66.3	63.9	63.4	72.7	65.2	79.6
U	-Y (X)	16.8	16.0	11.8	25.8	17.3	34.9
X	-Z (◇)	33.6	28.1	28.9	40.1	38.8	48.1

250 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1

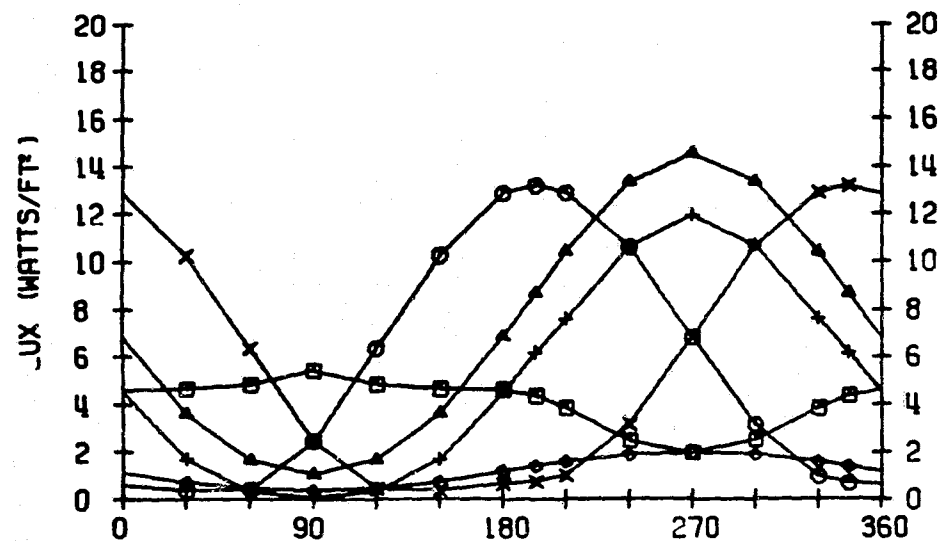


LOCATION 2

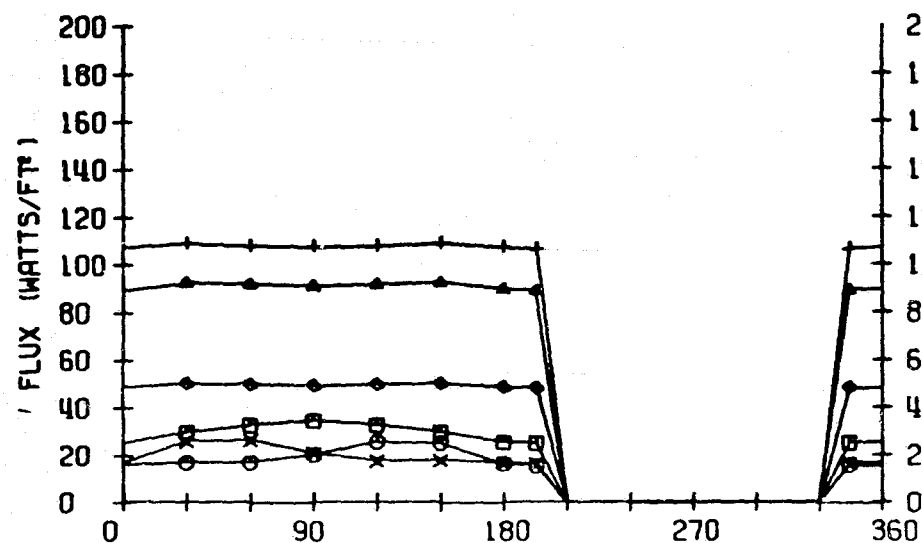
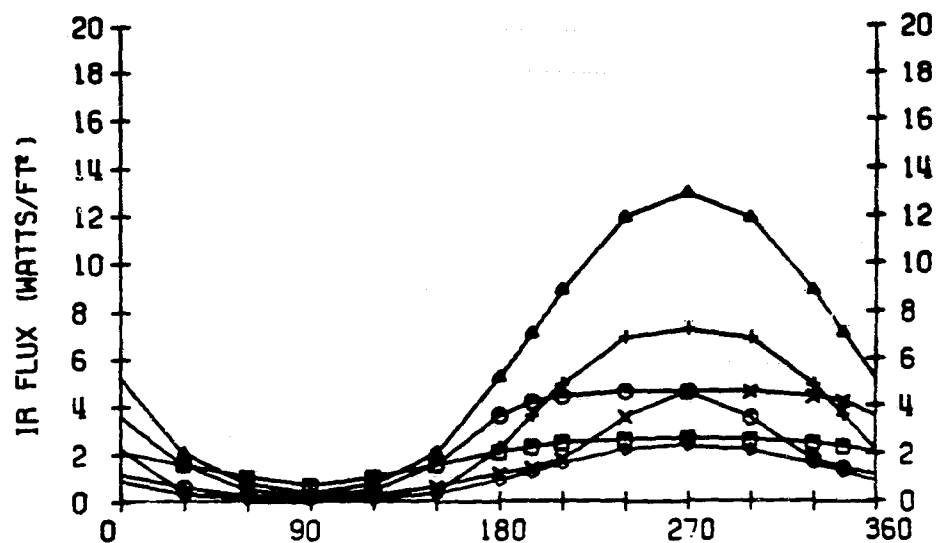


250 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

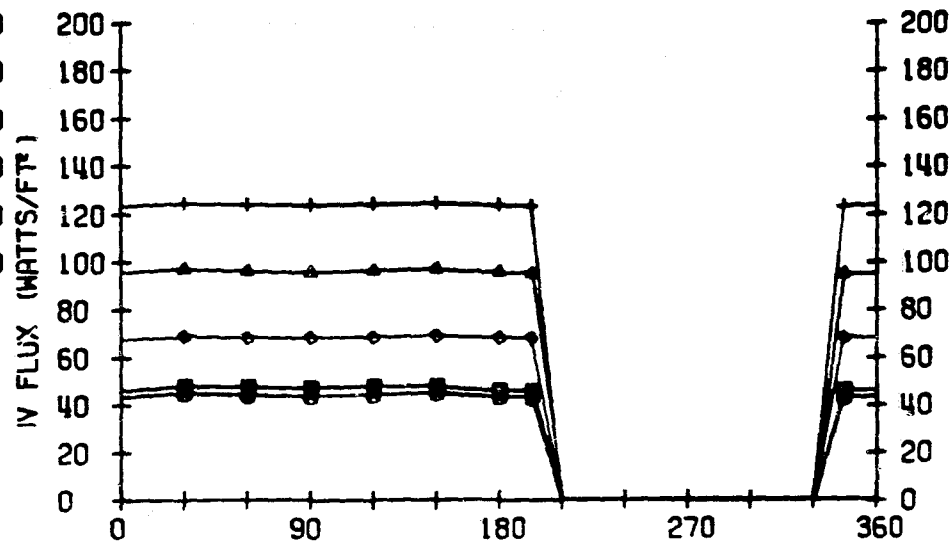
LOCATION 3



LOCATION 4



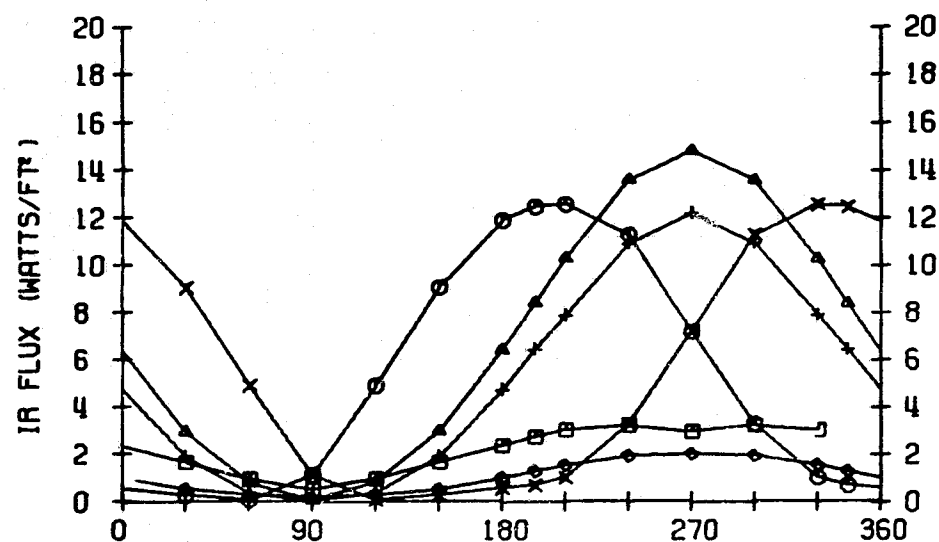
ORBIT POSITION (DEG)



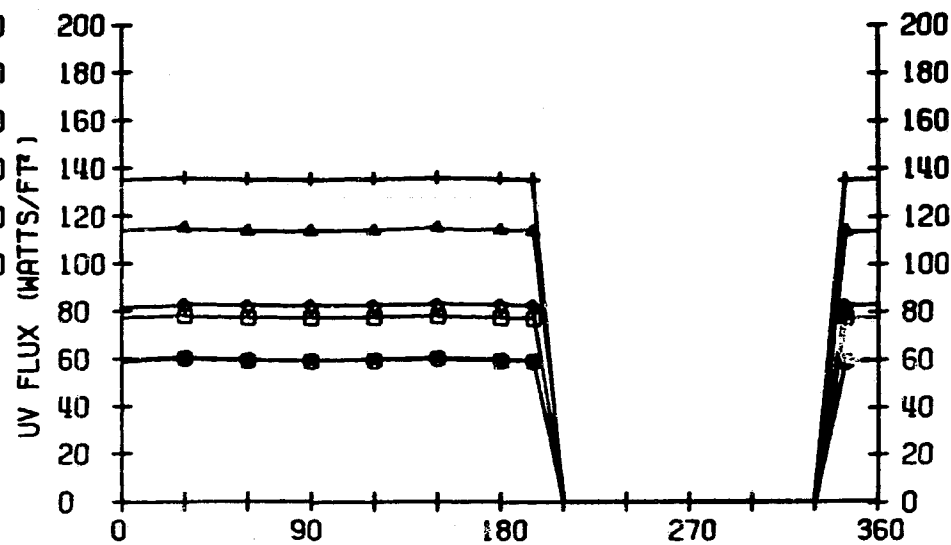
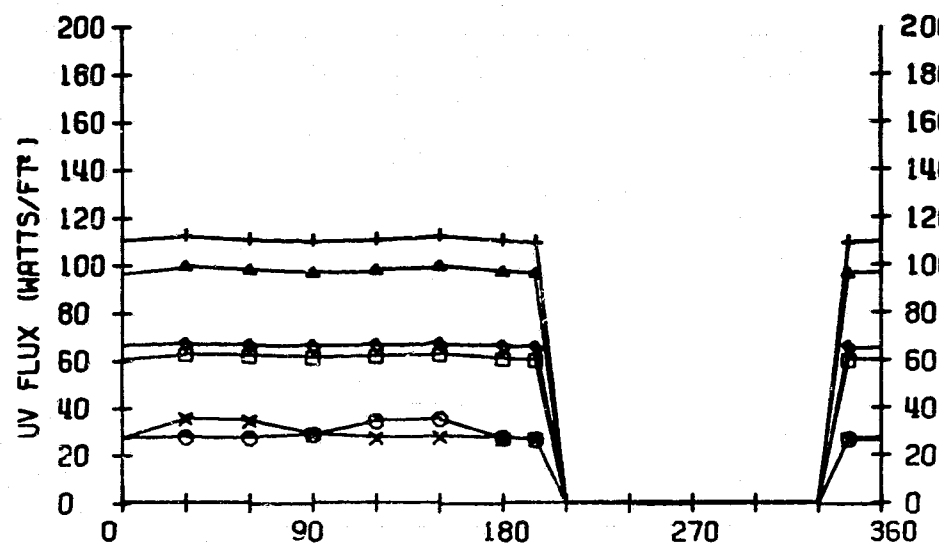
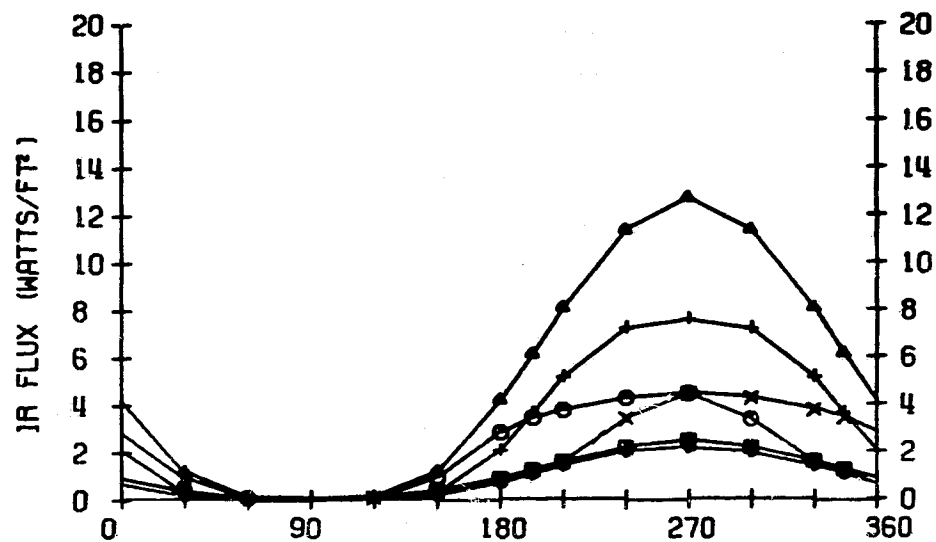
ORBIT POSITION (DEG)

250 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	22.5	19.5	16.6	27.8	37.7	48.1
R	+Y (○)	19.5	15.3	10.6	27.7	19.0	41.8
F	+Z (△)	0.5	0.3	0.2	5.2	4.7	16.9
L	-X (+)	18.2	15.7	13.4	23.3	15.0	32.6
U	-Y (X)	19.3	16.5	10.9	27.4	19.0	41.8
X	-Z (◇)	33.8	33.0	31.6	37.1	45.1	53.3

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

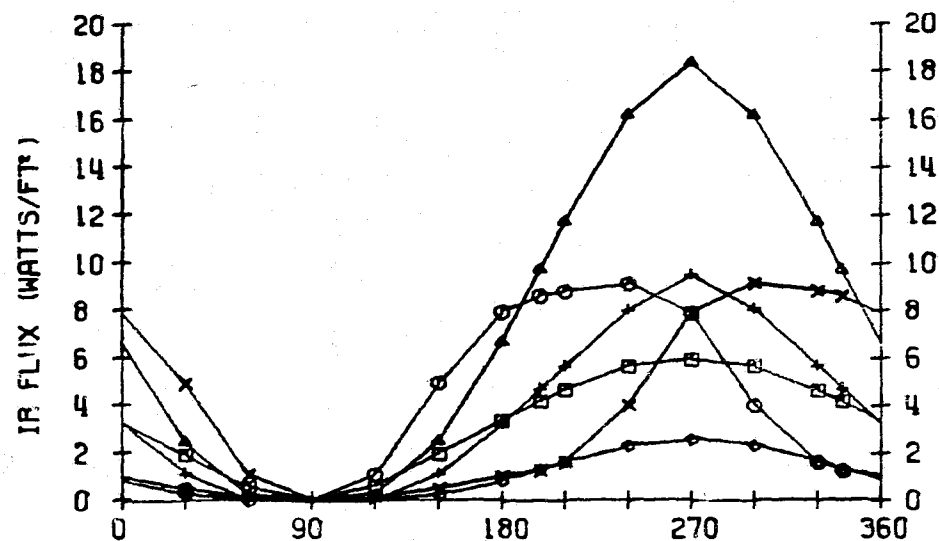
FOR

250 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

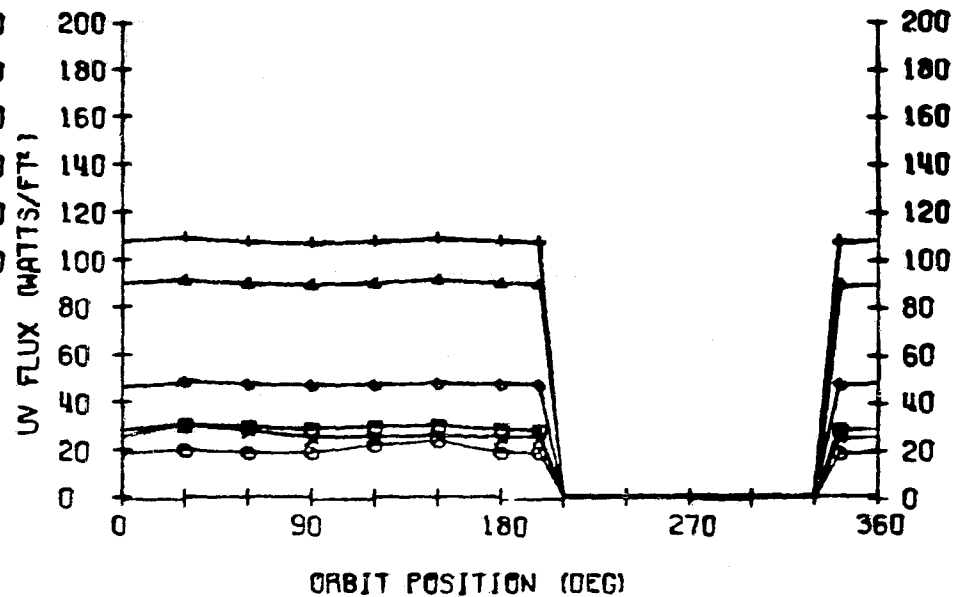
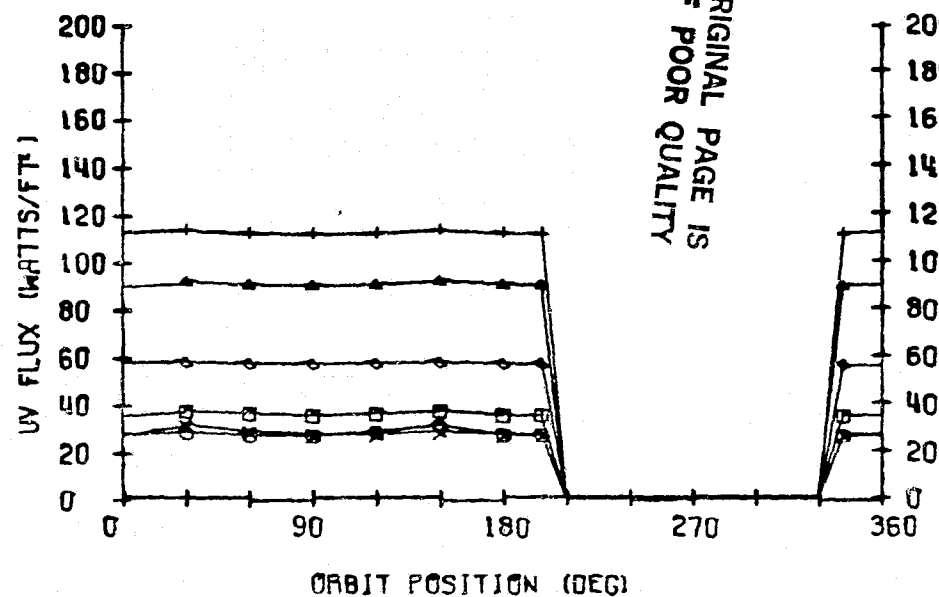
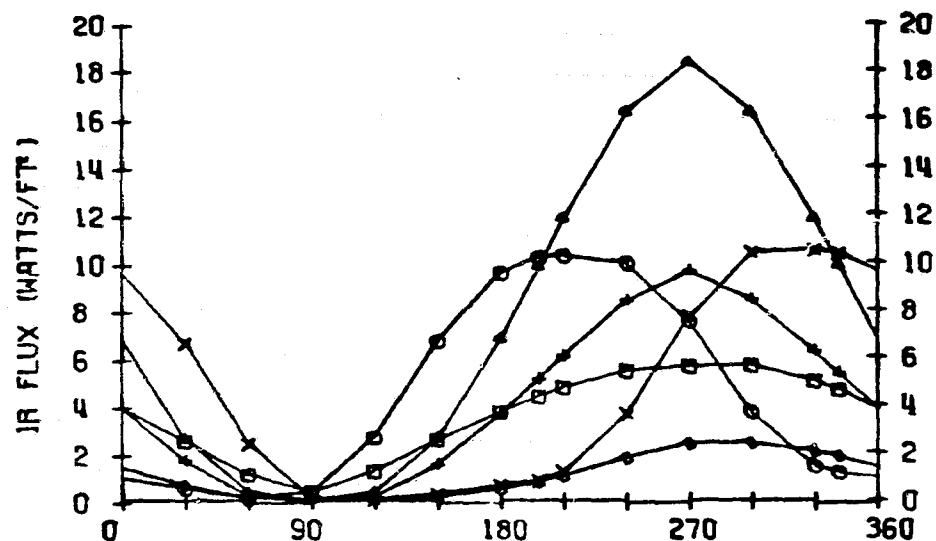
		LDC. 1	LDC. 2	LDC. 3	LDC. 4	LDC. 5	LDC. 6
	SURFACE DIRECTION						
I	+X (□)	3.2	3.5	4.1	2.4	2.3	1.1
R	+Y (○)	3.9	4.5	5.6	2.4	5.3	1.9
F	+Z (Δ)	7.7	7.8	7.8	6.6	7.4	5.4
L	-X (+)	3.8	4.2	4.8	3.0	4.9	3.0
U	-Y (×)	3.9	4.4	5.6	2.4	5.3	1.9
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.9
U	+X (□)	21.3	17.5	16.1	27.8	36.8	46.6
V	+Y (○)	16.6	12.1	11.0	26.1	17.4	35.7
F	+Z (Δ)	54.1	54.0	53.9	57.2	58.3	68.5
L	-X (+)	67.9	65.4	64.9	74.4	66.9	81.6
U	-Y (×)	16.7	15.8	11.3	26.1	17.4	35.7
X	-Z (◇)	34.3	28.5	29.3	40.9	39.7	49.4

250 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1



LOCATION 2

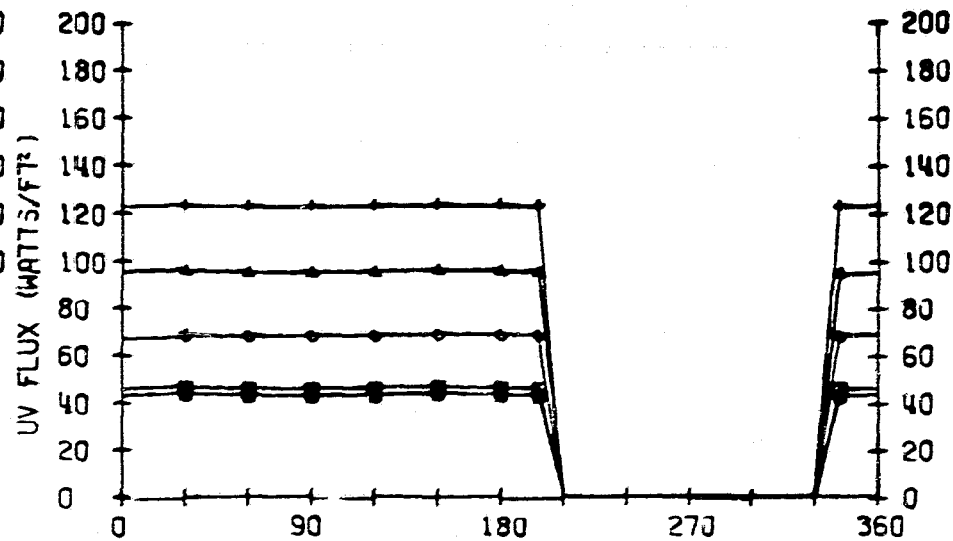
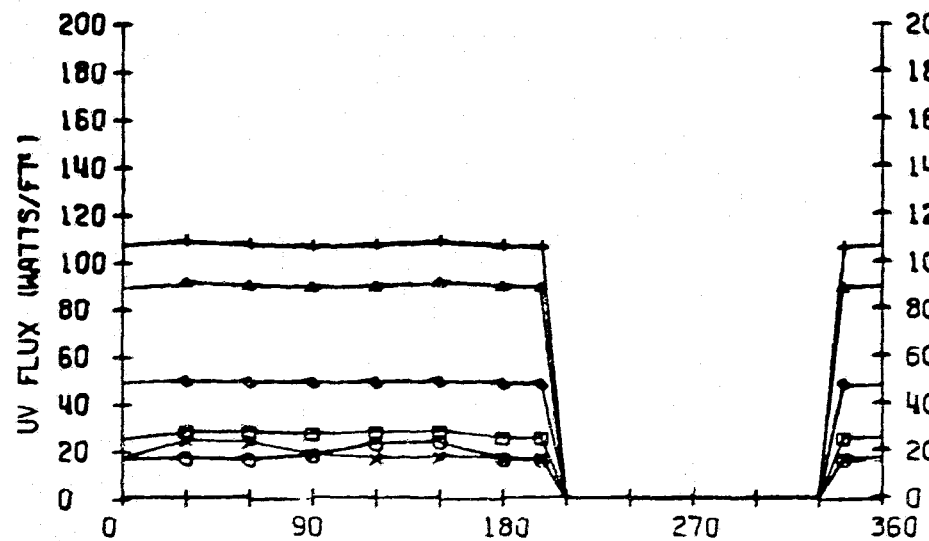
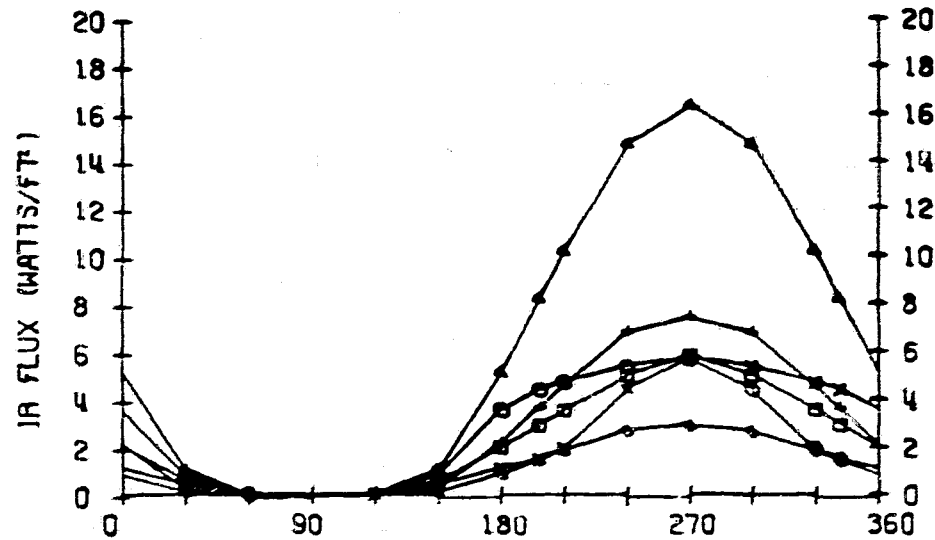
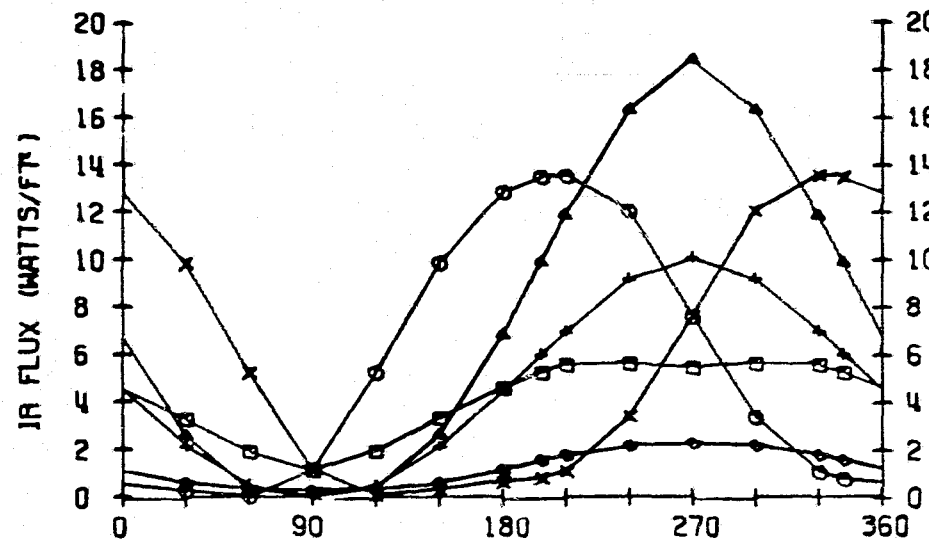


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250 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3

LOCATION 4

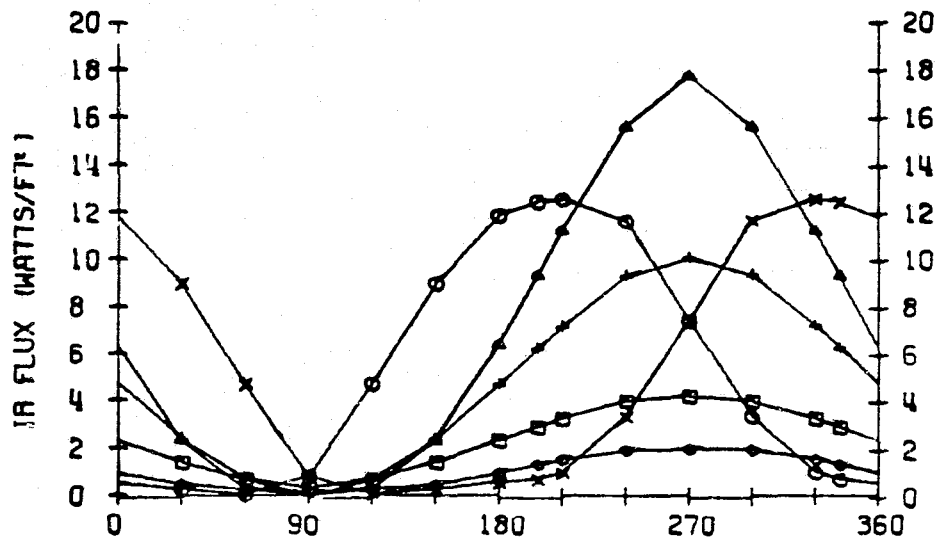


ORBIT POSITION (DEG)

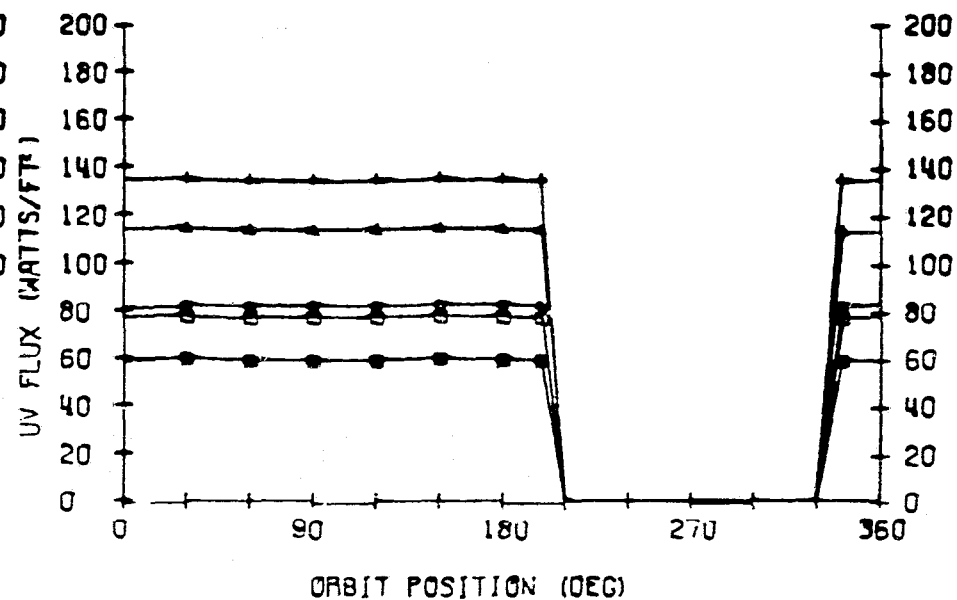
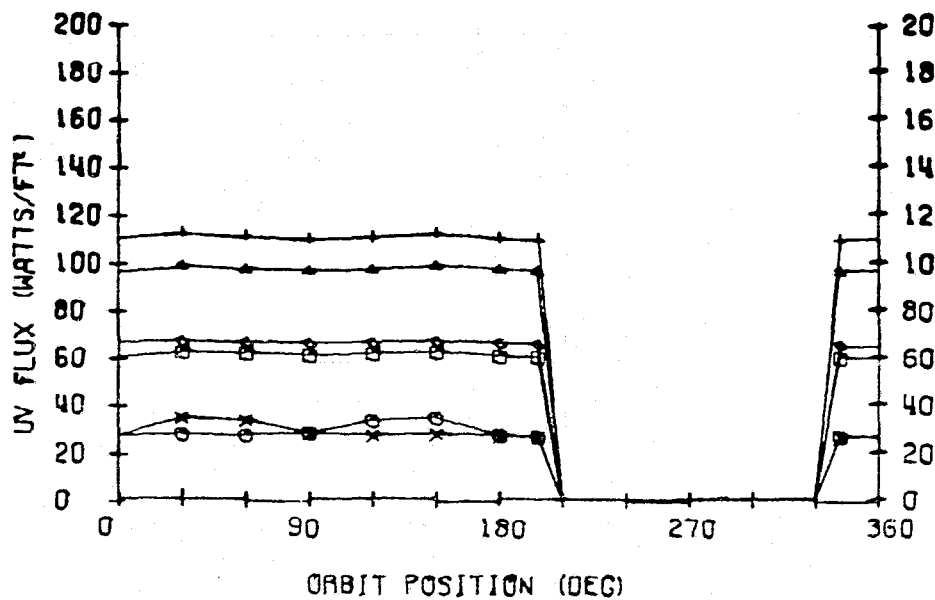
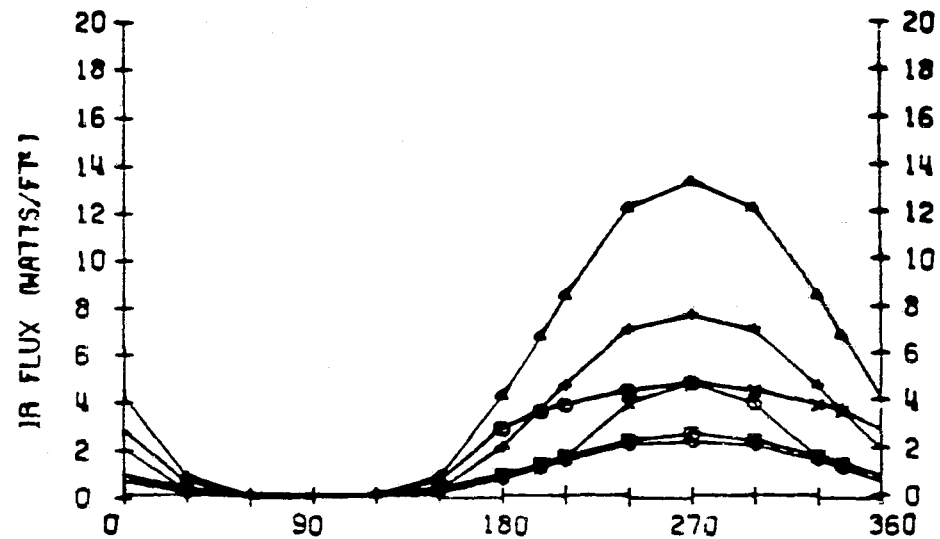
ORBIT POSITION (DEG)

250 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FGR

250 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	22.9	19.7	16.8	28.3	38.0	48.6
R	+Y (○)	19.9	15.5	10.8	28.2	19.2	42.3
F	+Z (△)	0.5	0.4	0.2	5.2	4.7	17.1
L	-X (+)	18.4	16.0	13.6	23.7	15.2	33.1
U	-Y (X)	19.6	16.8	11.1	28.0	19.2	42.3
X	-Z (◇)	34.5	33.6	32.1	37.9	45.7	53.9

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

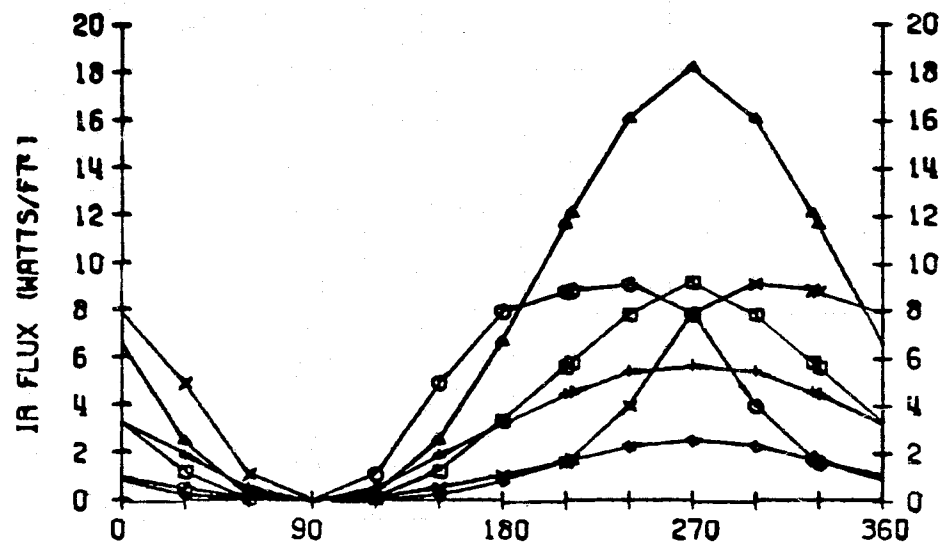
FOR

250 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

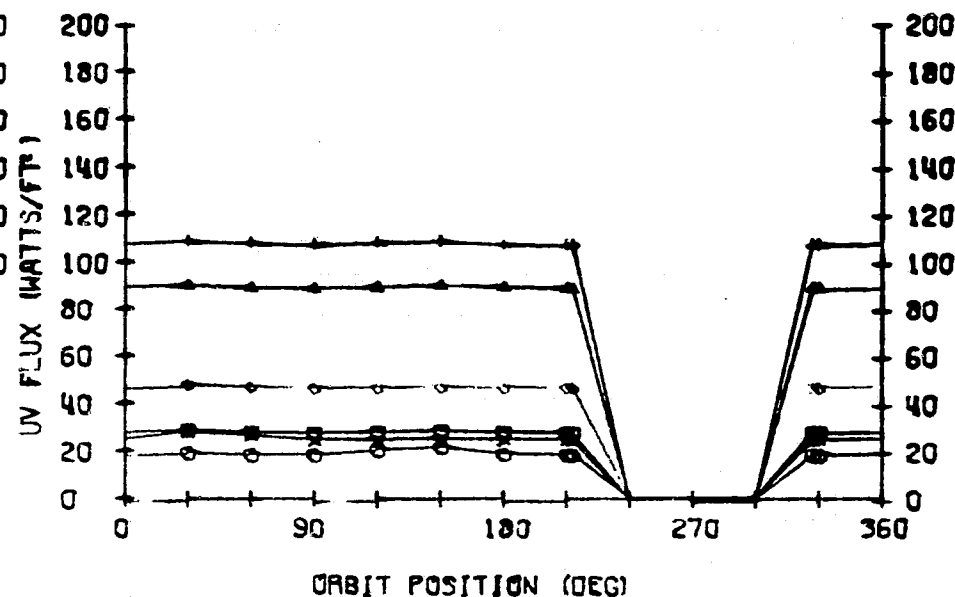
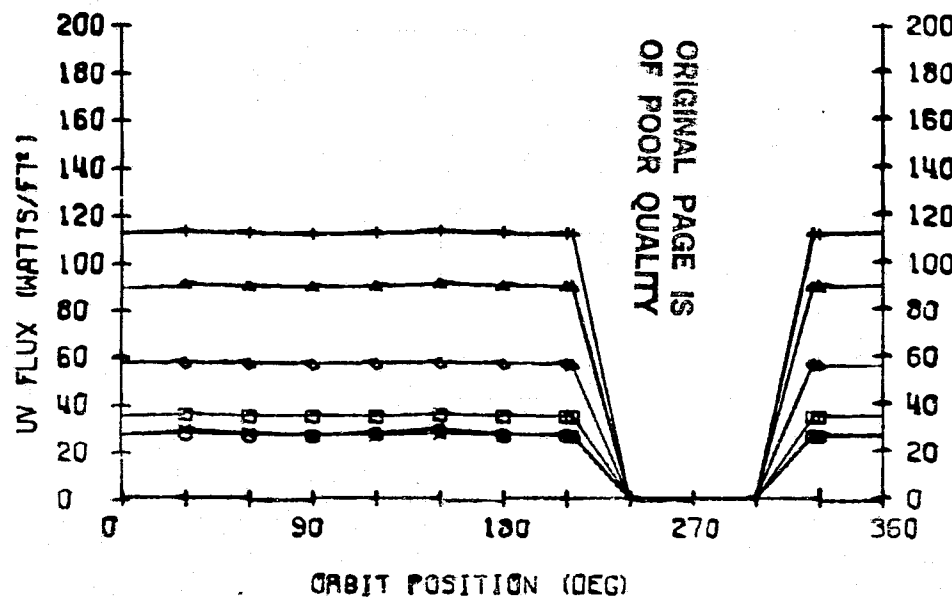
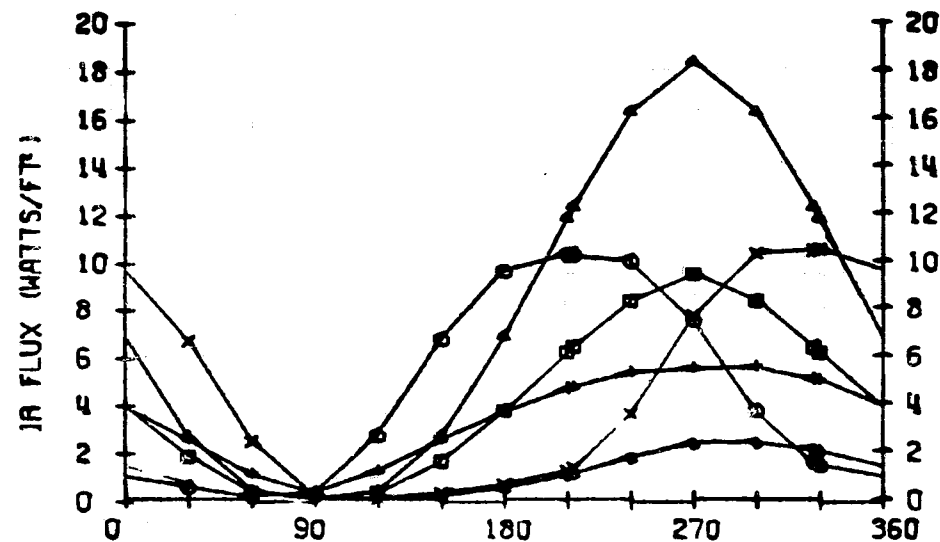
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.8	4.2	4.8	2.7	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.3	5.2	1.8
F	+Z (△)	7.7	7.8	7.8	6.5	7.2	5.0
L	-X (+)	3.1	3.5	4.0	2.4	4.2	2.3
U	-Y (x)	3.9	4.4	5.6	2.3	5.2	1.8
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.8
U	+X (□)	23.9	19.2	17.5	31.4	41.6	52.8
V	+Y (○)	18.5	13.2	11.6	29.5	19.1	40.5
F	+Z (△)	61.2	61.0	60.9	64.8	66.0	77.7
L	-X (+)	77.0	74.2	73.8	84.3	76.1	92.5
U	-Y (x)	18.6	17.4	12.0	29.5	19.1	40.5
X	-Z (◇)	38.8	32.2	33.1	46.3	44.9	56.0

250 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1



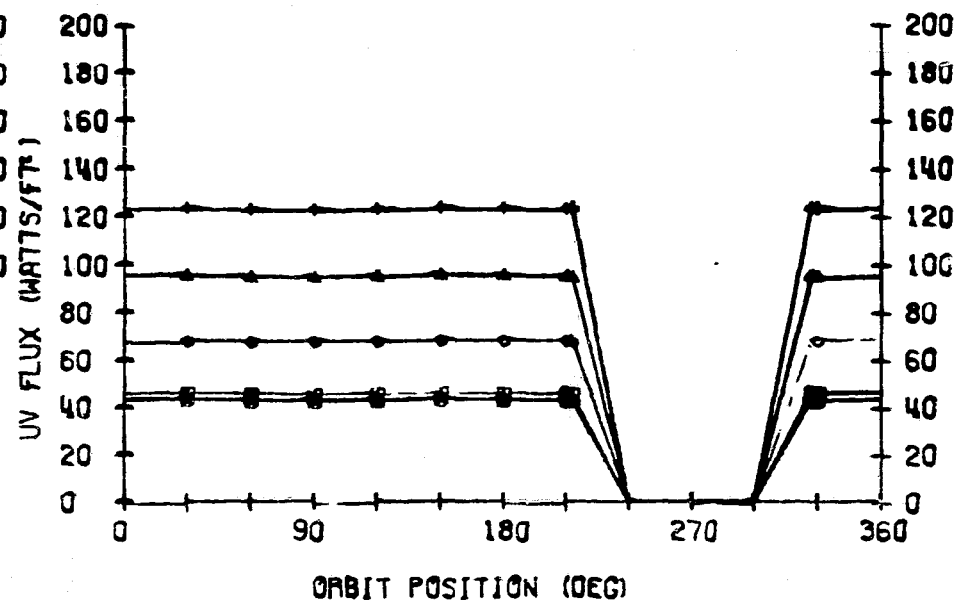
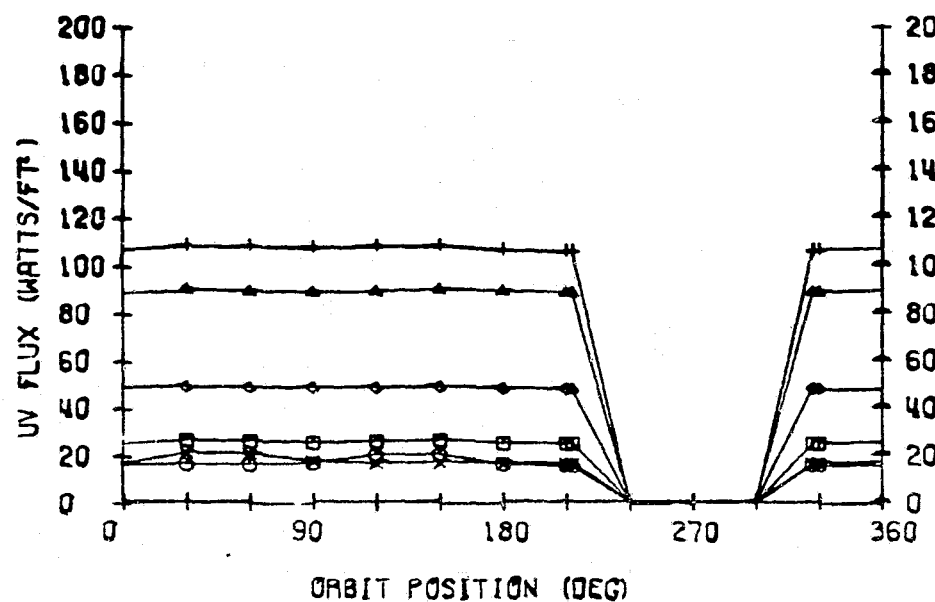
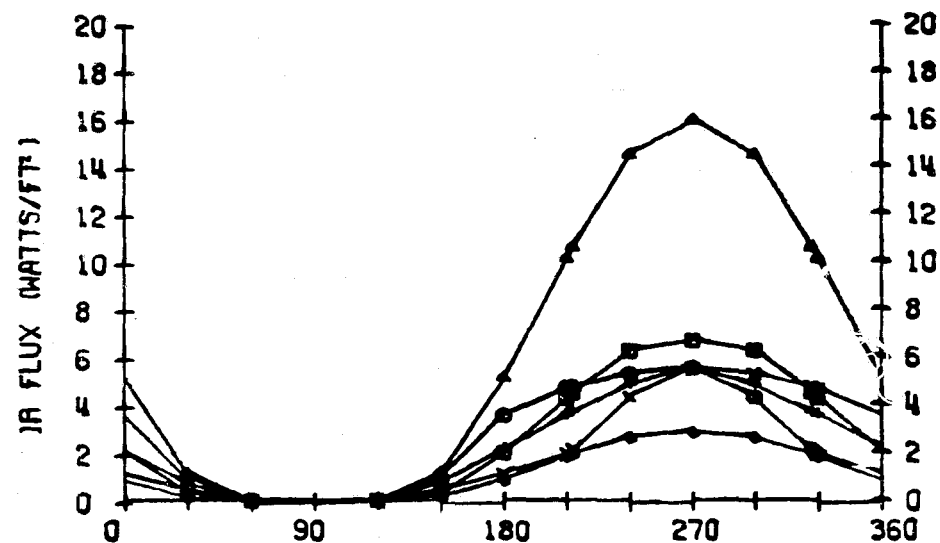
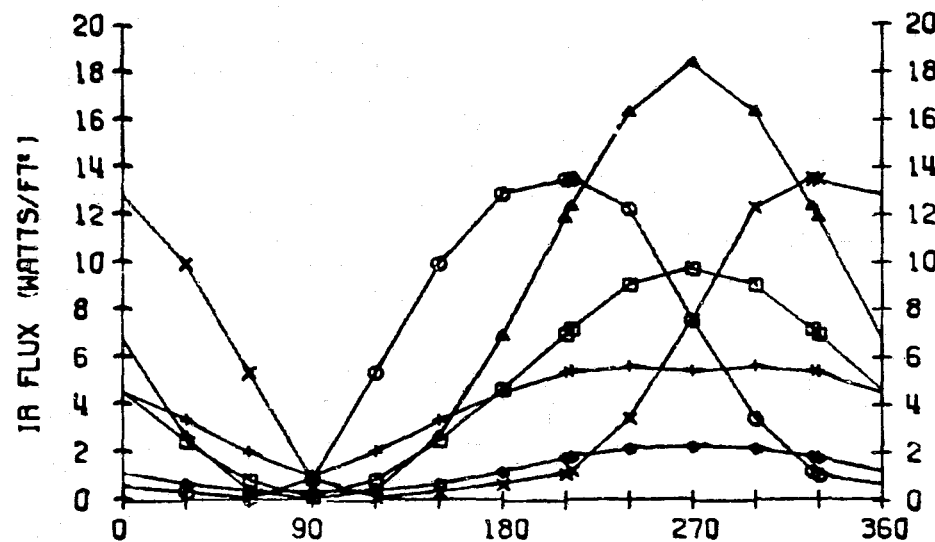
LOCATION 2



250 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

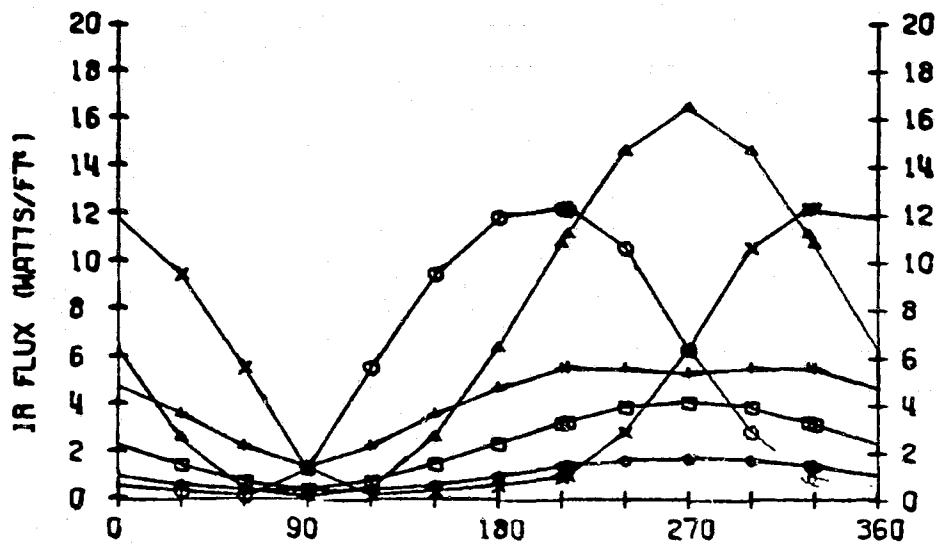
LOCATION 3

LOCATION 4

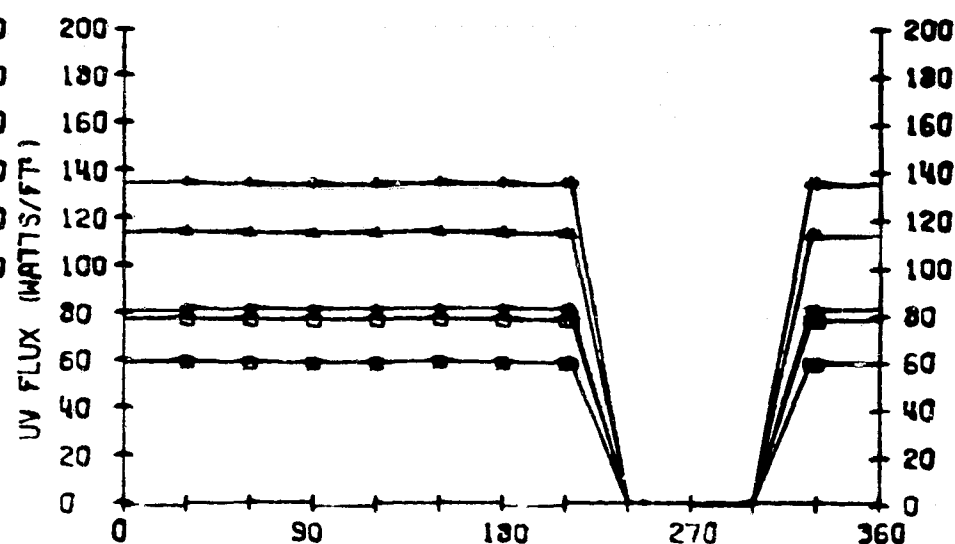
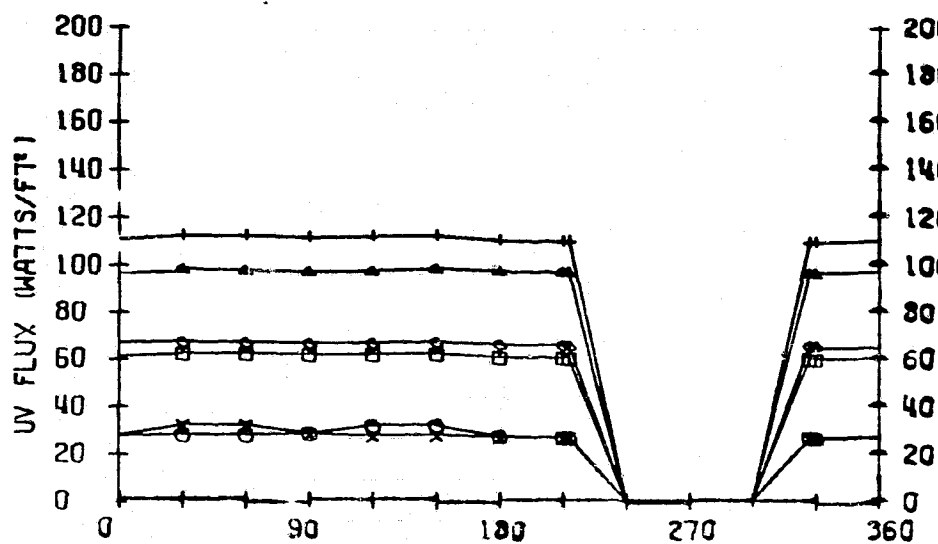
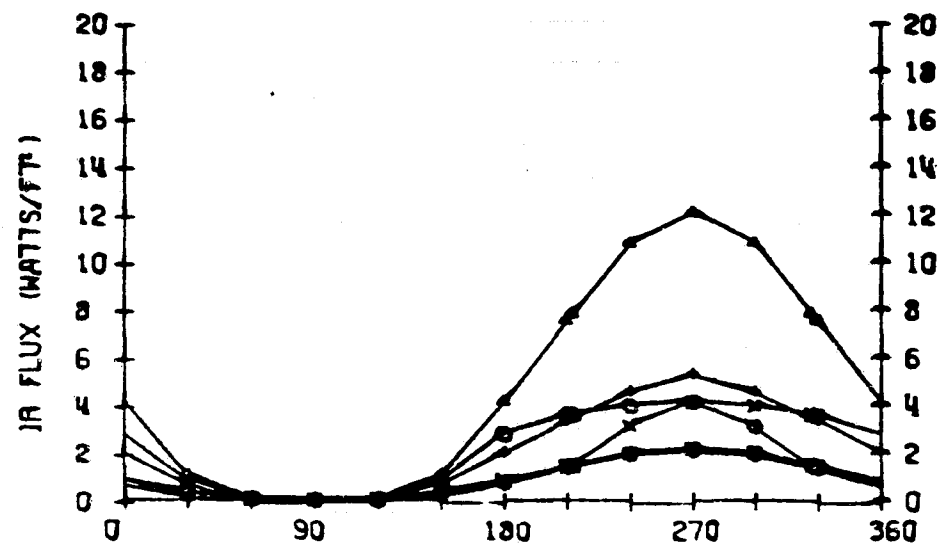


250 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FCR

250 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LCC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	26.3	22.7	19.3	32.6	43.8	56.1
R	+Y (○)	22.3	17.7	12.4	32.5	22.1	48.8
F	+Z (△)	0.6	0.4	0.2	6.0	5.4	19.6
L	-X (+)	21.2	18.3	15.6	27.3	17.5	38.2
U	-Y (X)	22.5	19.4	12.7	32.2	22.1	48.8
X	-Z (◇)	39.7	38.5	37.0	43.8	52.7	62.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

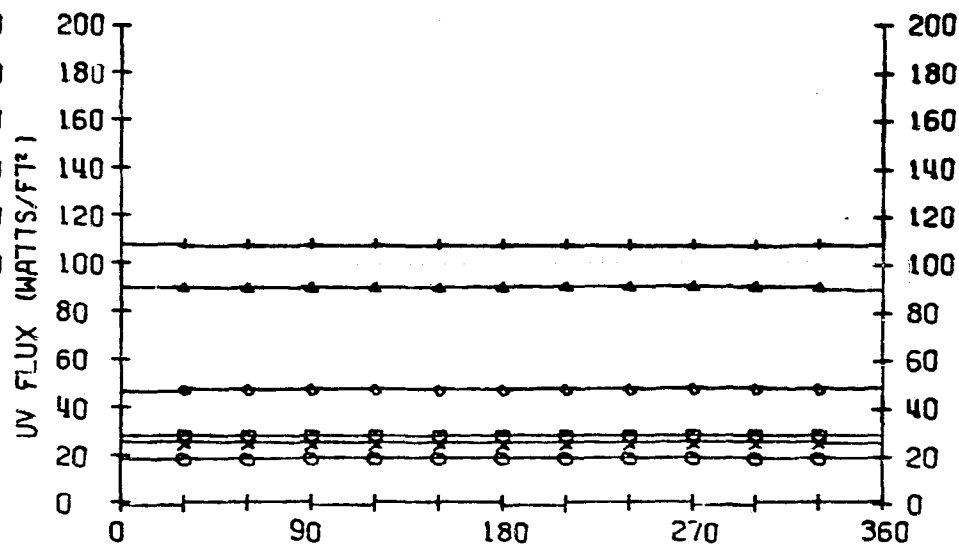
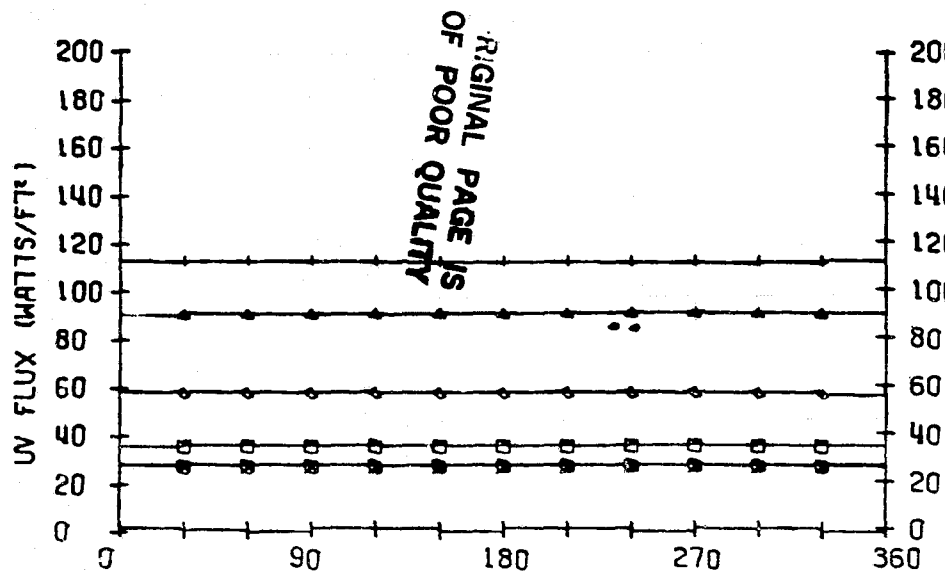
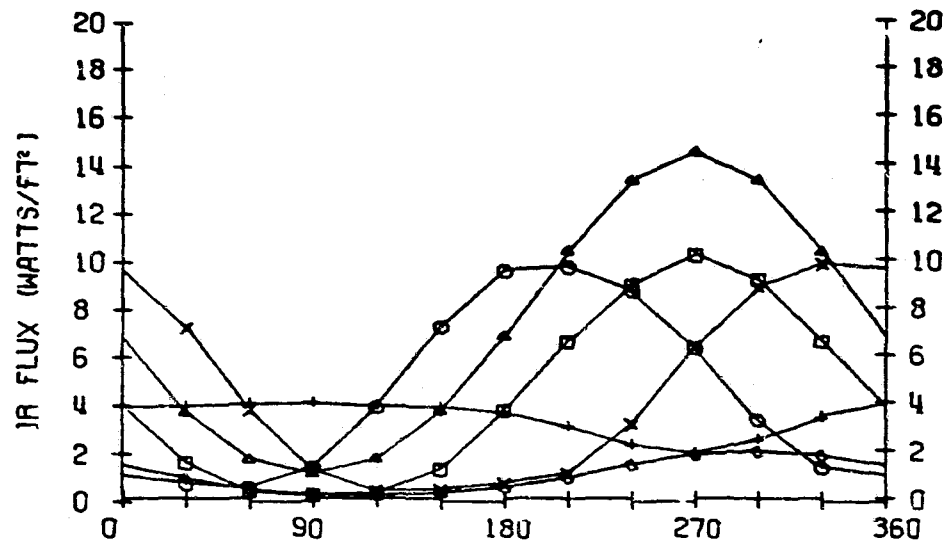
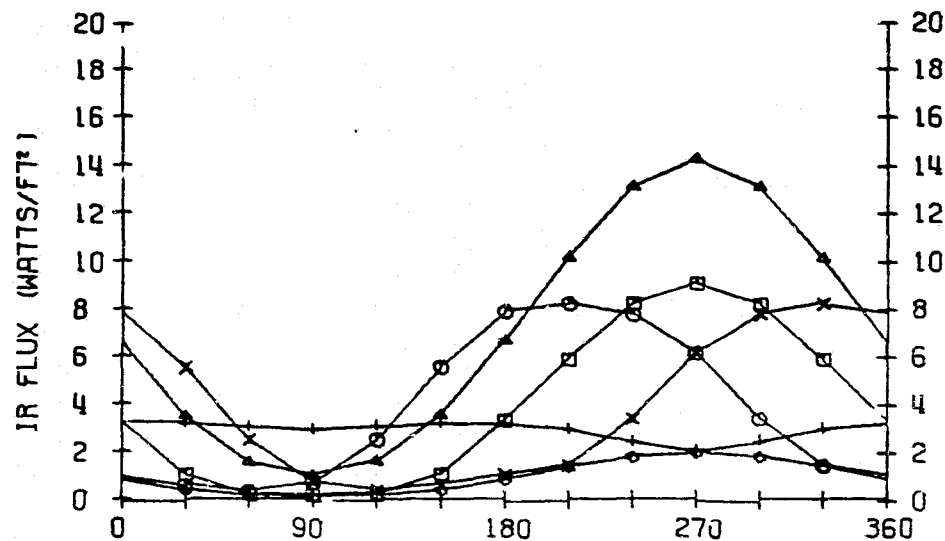
250 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

	SURFACE DIRECTION	LUC. 1	LUC. 2	LUC. 3	LUC. 4	LUC. 5	LUC. 6
I	+X (□)	3.9	4.4	5.0	2.7	2.3	0.9
R	+Y (○)	3.8	4.5	5.6	2.2	5.1	1.6
F	+Z (Δ)	7.1	7.3	7.3	5.8	6.5	4.3
L	-X (+)	2.9	3.4	4.1	2.1	4.3	2.1
U	-Y (×)	3.8	4.4	5.6	2.2	5.1	1.6
X	-Z (◇)	0.9	0.9	1.1	1.0	0.9	0.7
U	+X (□)	34.8	27.9	25.2	46.0	60.3	77.4
V	+Y (○)	26.7	18.6	15.9	43.2	26.8	59.3
F	+Z (Δ)	89.7	89.4	89.2	95.1	96.0	113.9
L	-X (+)	112.7	108.3	107.4	123.6	110.6	135.7
U	-Y (×)	26.9	25.0	16.5	43.2	26.9	59.3
X	-Z (◇)	56.9	47.1	48.4	68.0	65.7	82.1

250 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1

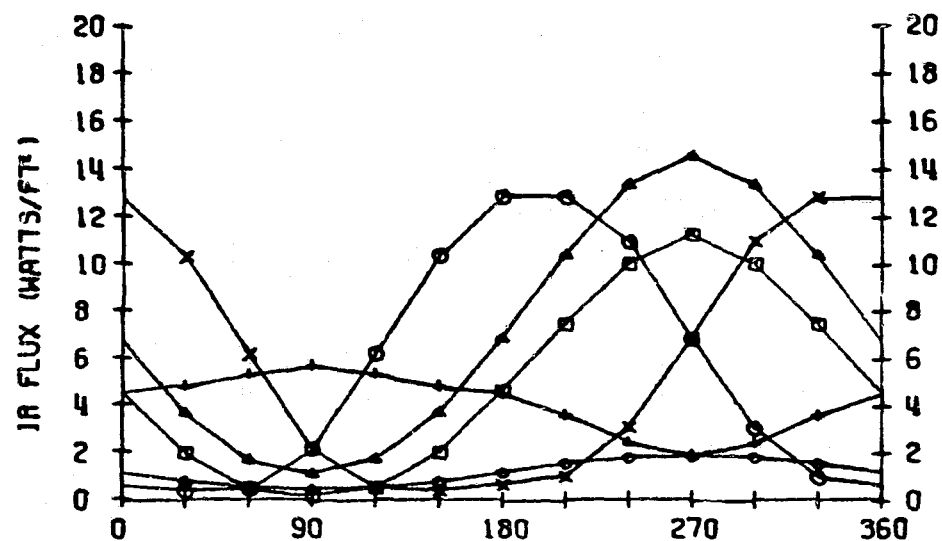
LOCATION 2



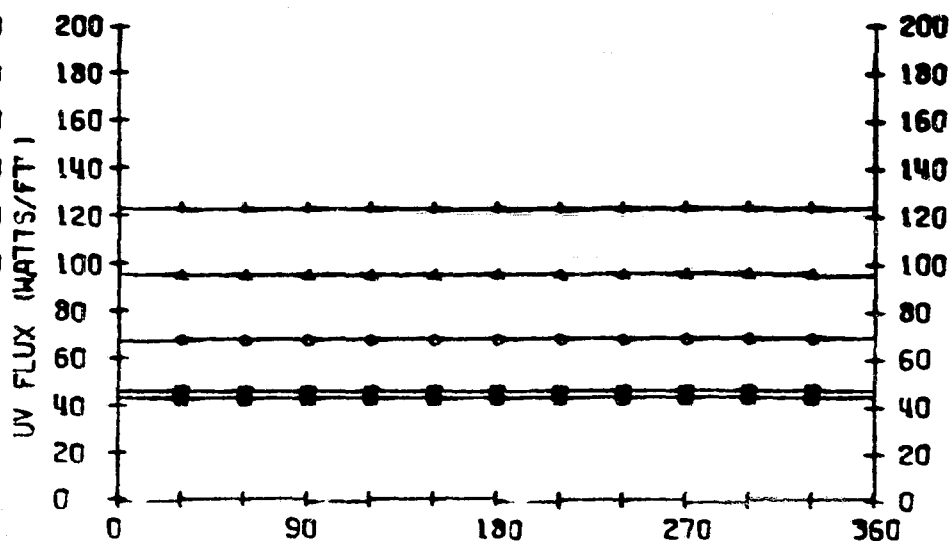
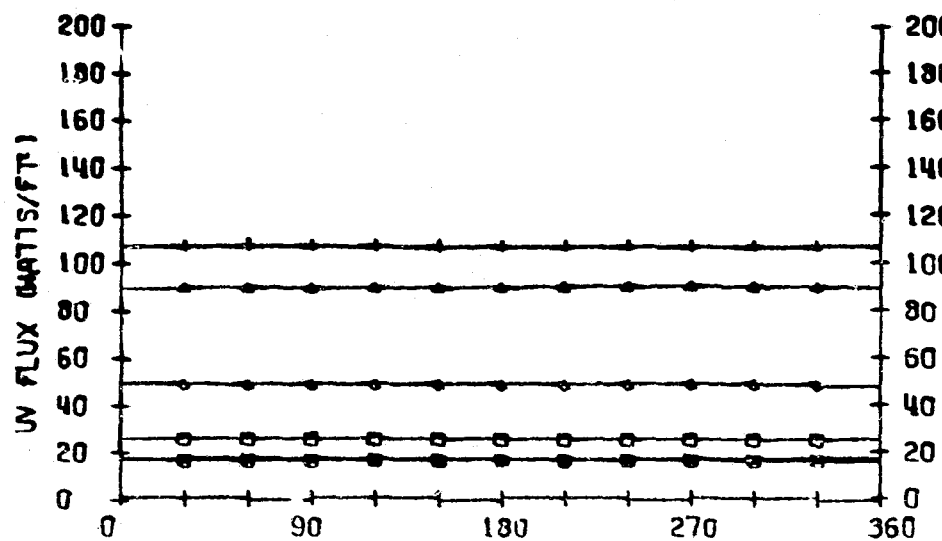
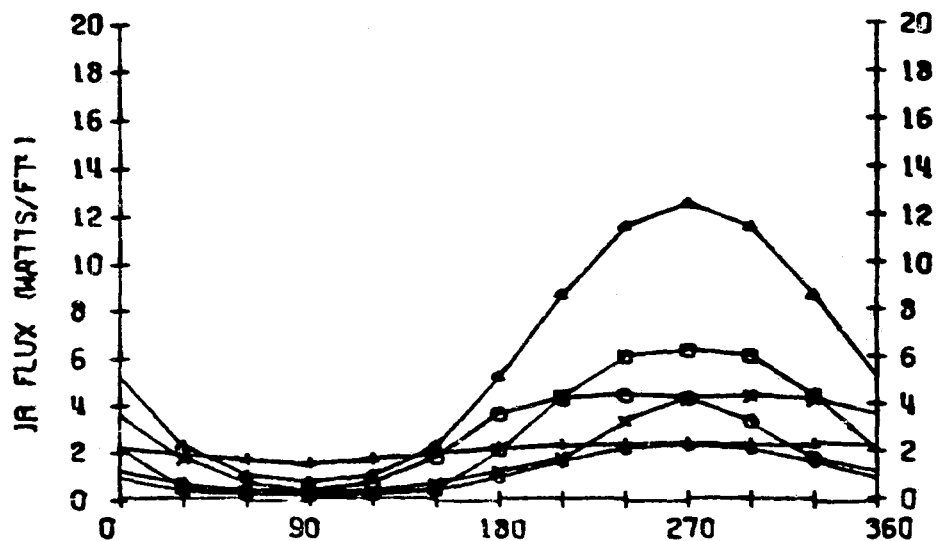
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250 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3



LOCATION 4

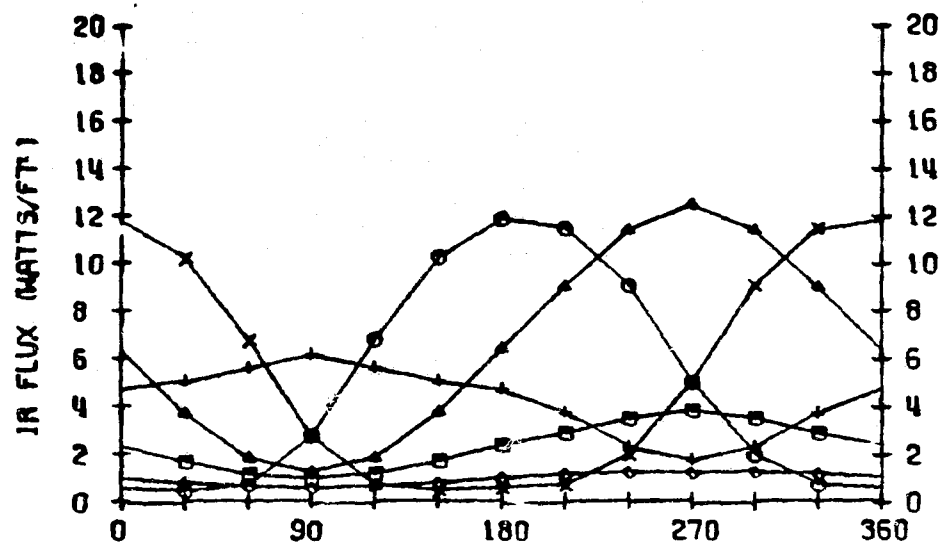


ORBIT POSITION (DEG)

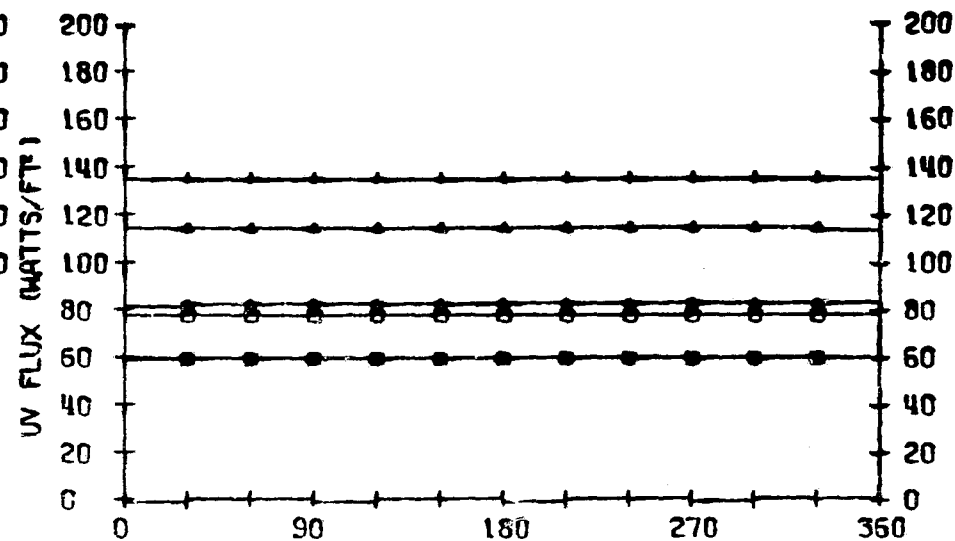
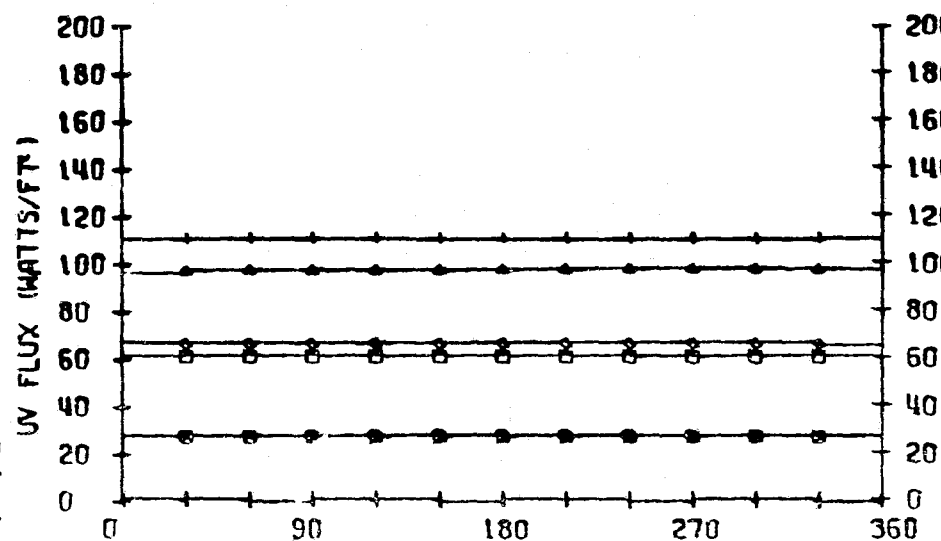
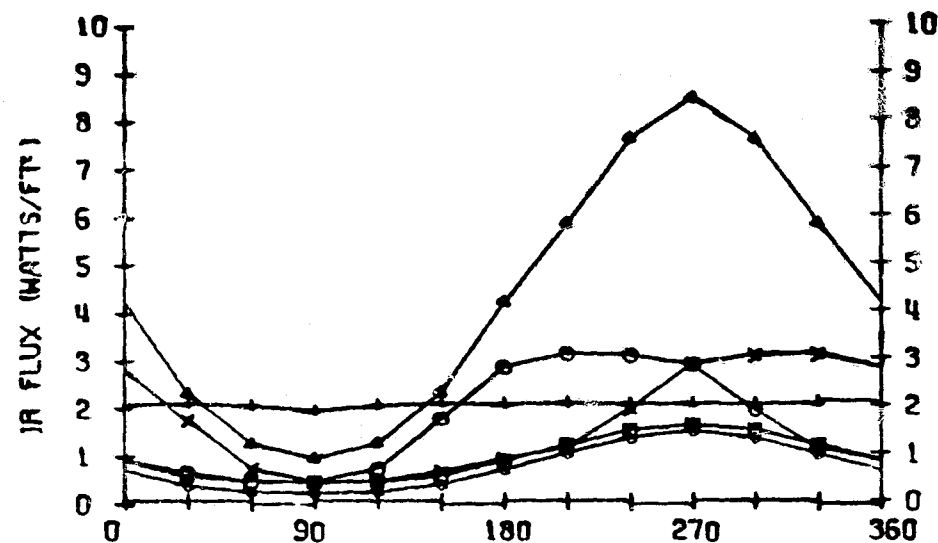
ORBIT POSITION (DEG)

250 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

CRUITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

		LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
	SURFACE DIRECTION						
I	+X (◻)	33.0	28.4	24.3	41.0	55.7	71.3
R	+Y (●)	28.4	22.0	15.4	40.6	28.0	62.0
F	+Z (Δ)	0.8	0.5	0.3	7.5	6.9	25.0
L	-X (+)	26.4	22.7	19.3	34.0	22.0	48.3
U	-Y (X)	28.0	24.2	15.8	40.2	28.0	62.0
X	-Z (◊)	49.7	48.1	46.2	54.9	66.8	79.4

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

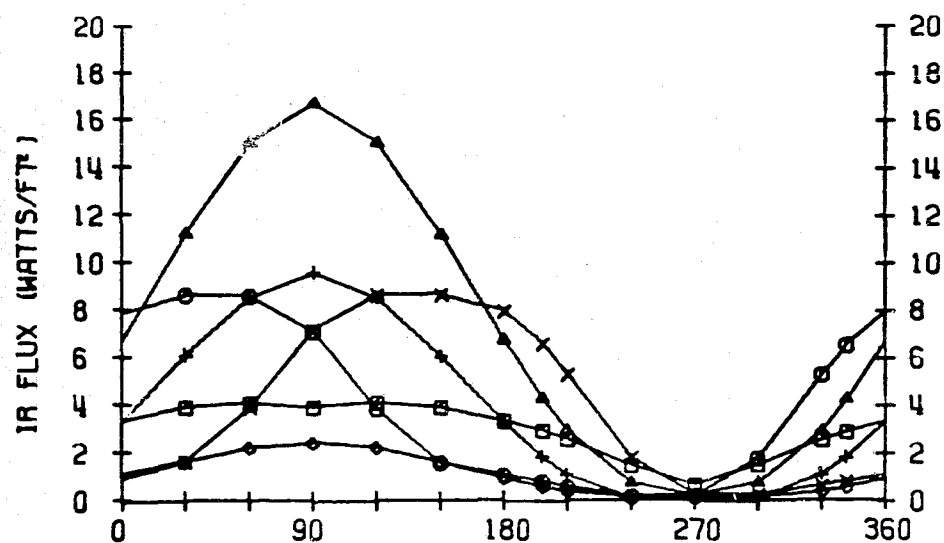
250 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.9	3.3	3.9	2.0	2.3	1.1
R	+Y (○)	3.8	4.5	5.6	2.3	5.3	1.9
F	+Z (Δ)	7.4	7.6	7.6	6.3	7.3	5.4
L	-X (†)	3.9	4.4	5.0	3.0	5.2	3.1
U	-Y (X)	3.9	4.4	5.6	2.3	5.3	1.9
X	-Z (◇)	1.0	1.0	1.2	1.1	1.1	0.9
U	+X (□)	3.5	3.2	3.0	3.8	4.0	3.8
V	+Y (○)	4.4	4.3	4.4	4.3	4.6	4.3
F	+Z (Δ)	6.5	6.5	6.5	6.2	6.8	6.2
L	-X (†)	5.2	5.4	5.8	4.9	5.9	5.2
U	-Y (X)	4.4	4.4	4.4	4.3	4.6	4.3
X	-Z (◇)	3.7	3.6	3.5	4.1	3.6	3.9

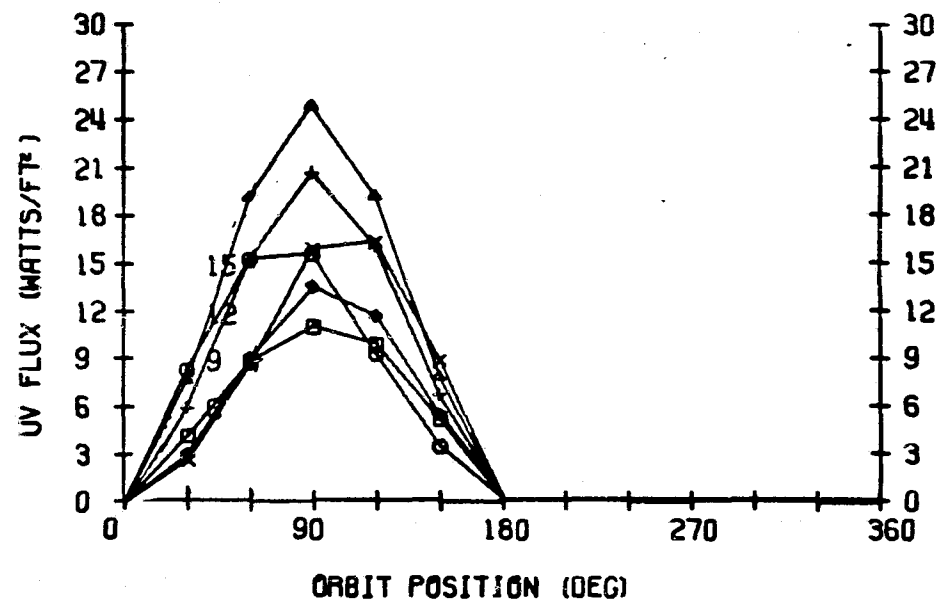
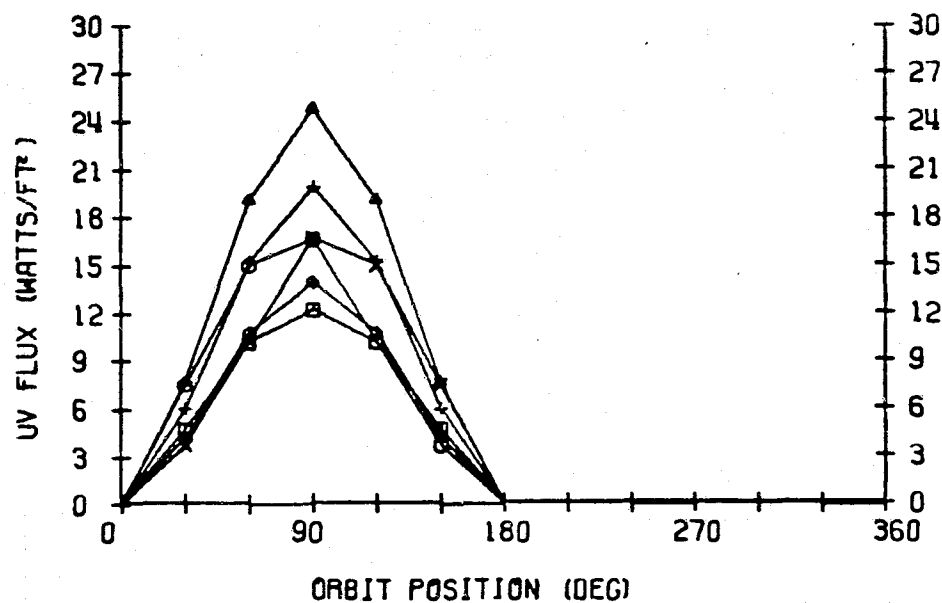
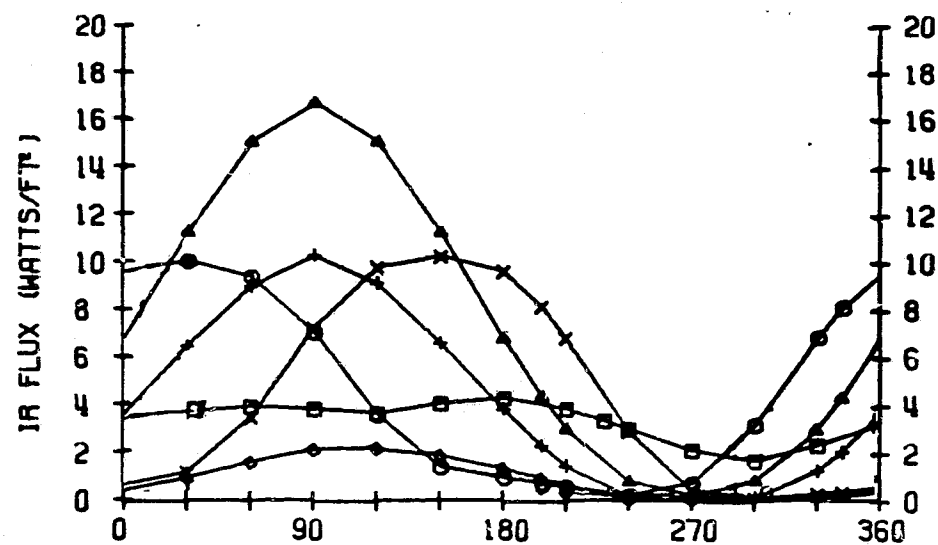
ORIGINAL PAGE IS
OF POOR QUALITY

250 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

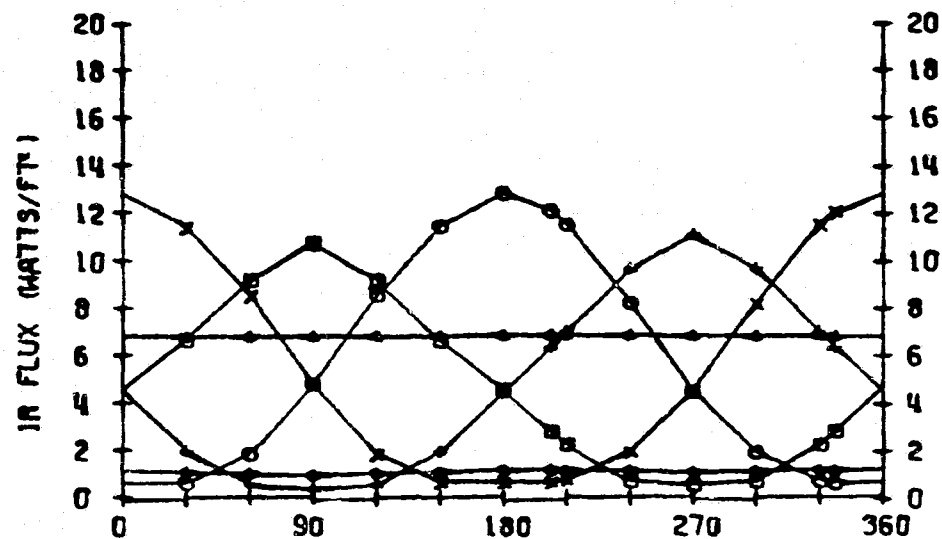


LOCATION 2

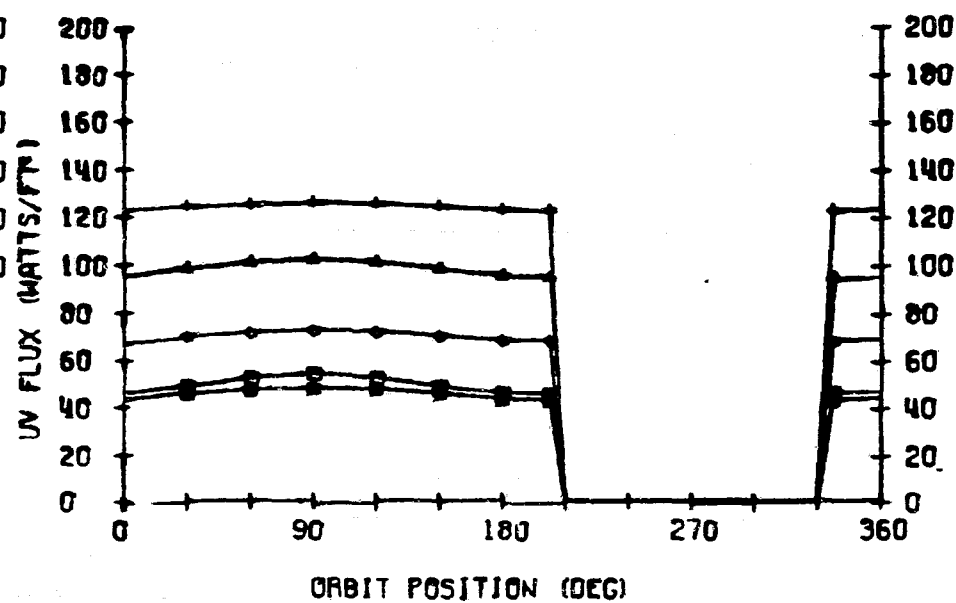
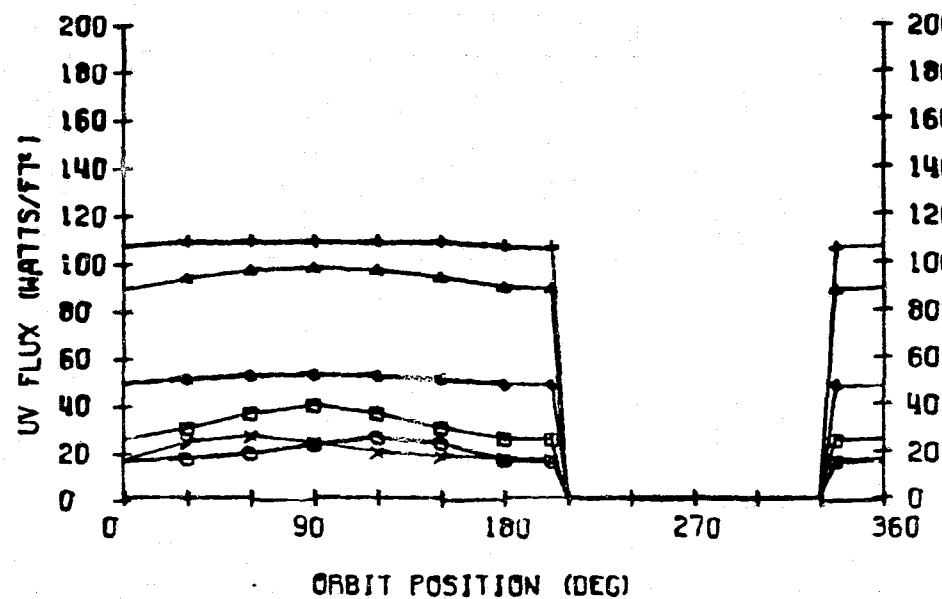
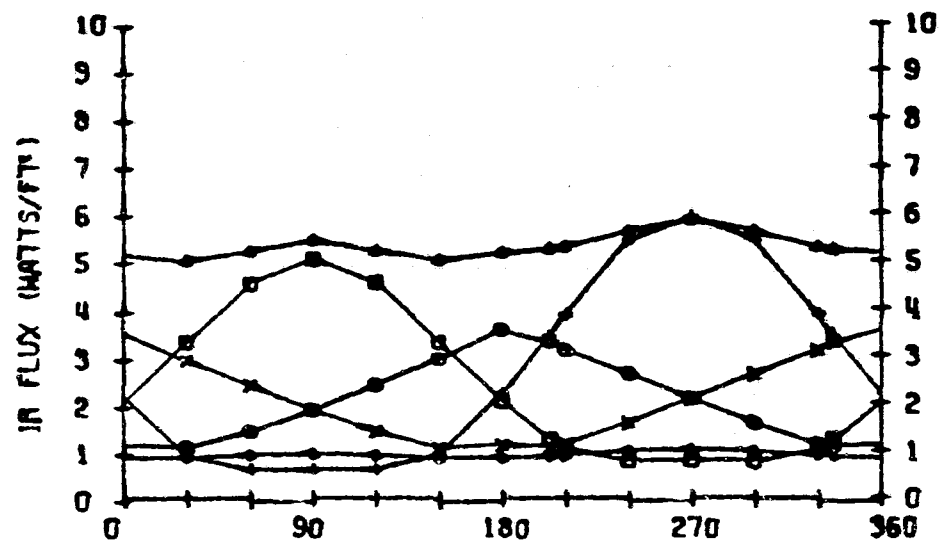


250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3

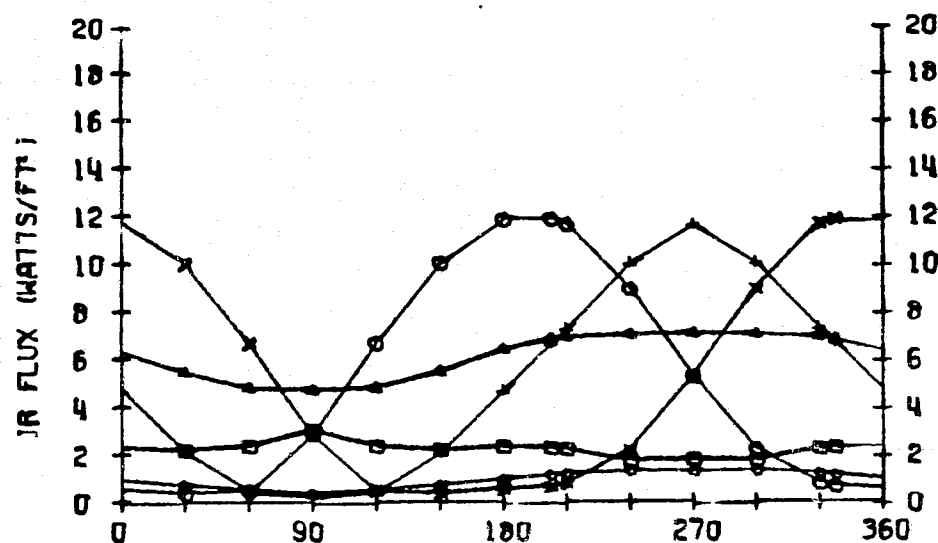


LOCATION 4

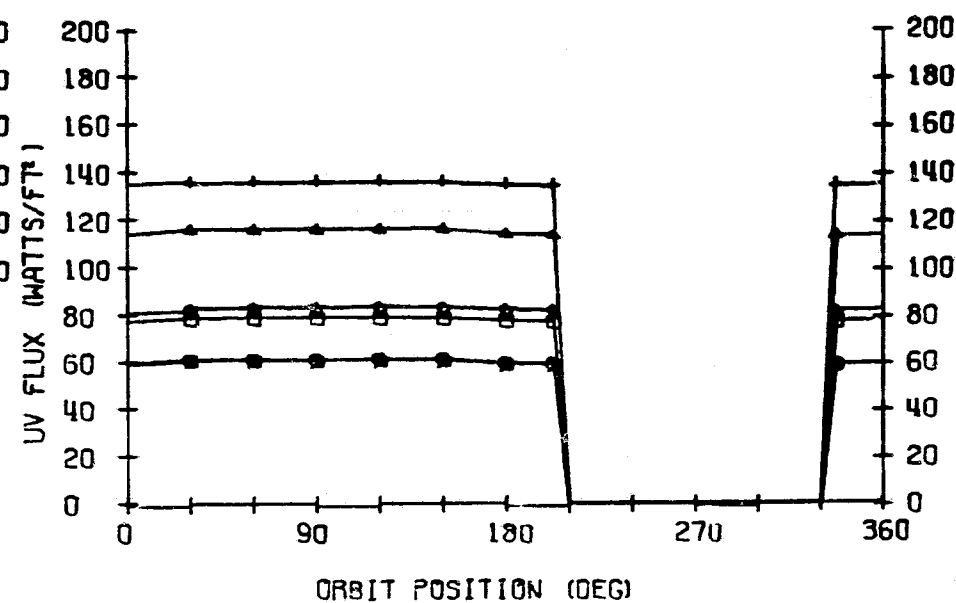
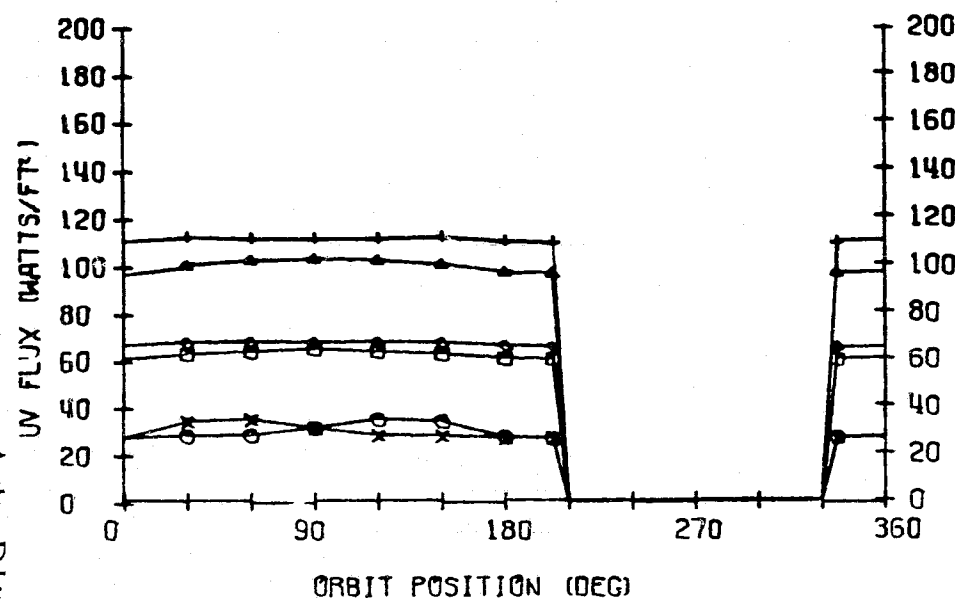
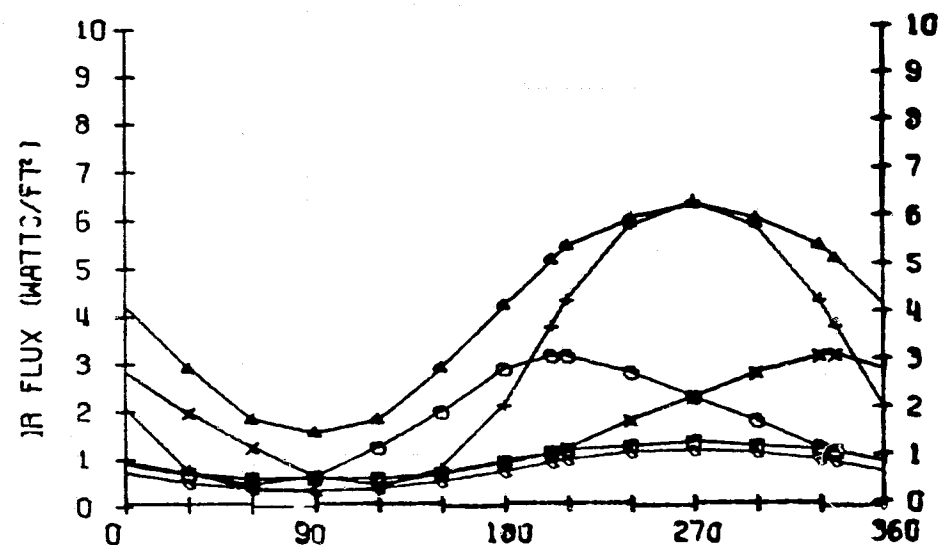


250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=-45 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	23.1	20.0	17.0	28.6	38.5	49.0
R	+Y (○)	20.2	15.8	11.0	28.6	19.4	42.5
F	+Z (△)	0.5	0.4	0.2	5.4	4.8	17.3
L	-X (+)	18.9	16.4	13.9	24.1	15.4	33.2
U	-Y (X)	19.9	17.1	11.3	28.3	19.4	42.5
X	-Z (◇)	34.9	34.1	32.5	38.3	45.9	53.9

FLUX DATA
FOR
ALTITUDE - 250 km
ORIENTATION NO. 3

Bay to sun, tail facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

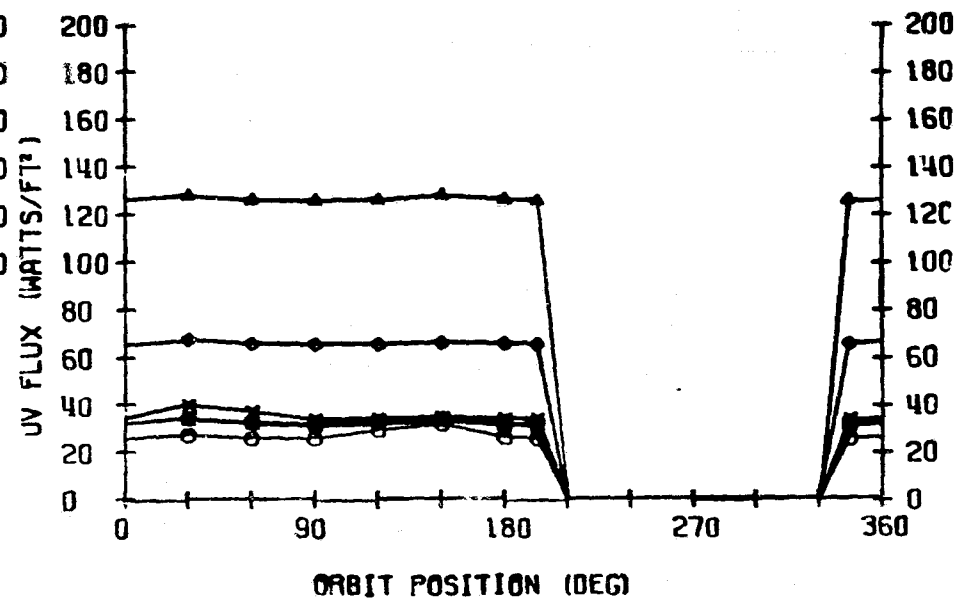
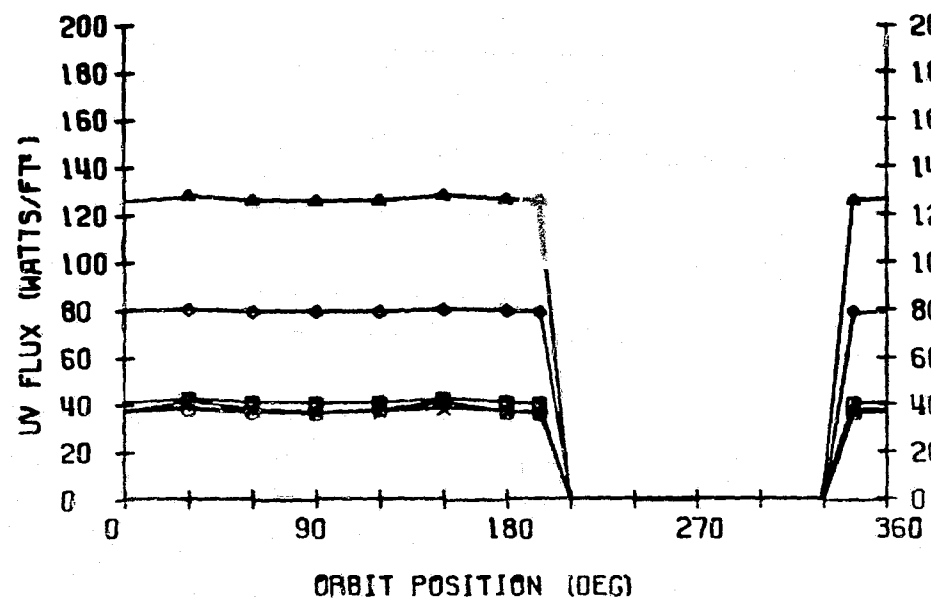
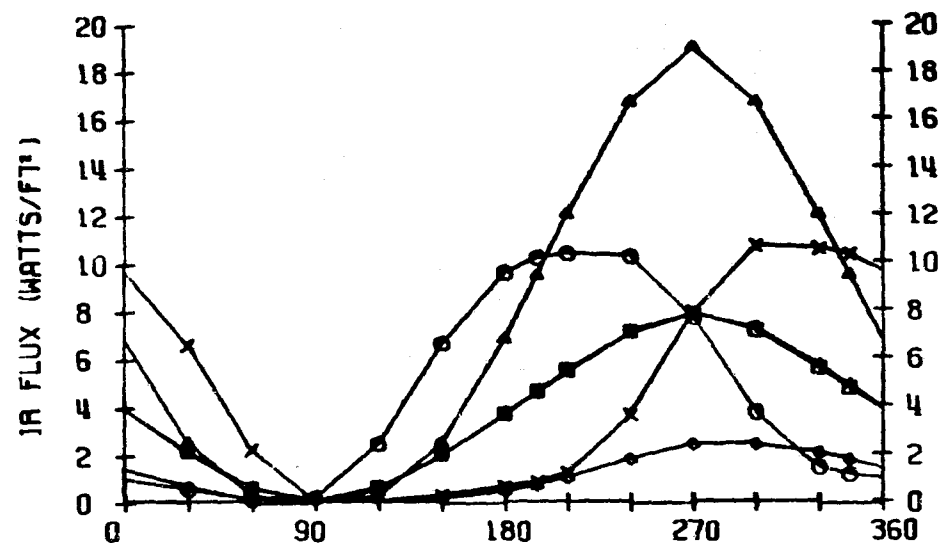
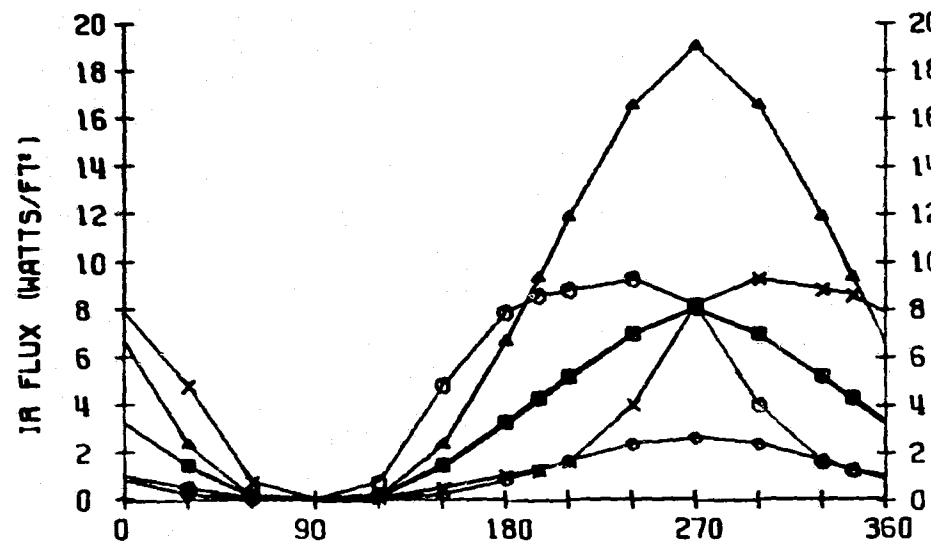
250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.5	3.9	4.4	2.6	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.4	5.2	1.9
F	+Z (Δ)	7.8	8.0	8.0	6.7	7.4	5.2
L	-X (+)	3.5	3.9	4.3	2.8	4.5	2.7
U	-Y (x)	3.9	4.5	5.6	2.4	5.2	1.9
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.9
U	+X (□)	24.2	19.2	16.8	33.7	12.8	32.9
V	+Y (○)	22.0	16.0	14.3	35.1	13.4	36.7
F	+Z (Δ)	74.1	74.0	74.0	78.0	75.0	80.8
L	-X (+)	22.4	19.0	18.7	30.8	18.2	34.1
U	-Y (x)	22.1	20.7	14.7	35.2	13.4	36.7
X	-Z (◇)	46.6	38.7	39.7	55.7	38.4	57.7

250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

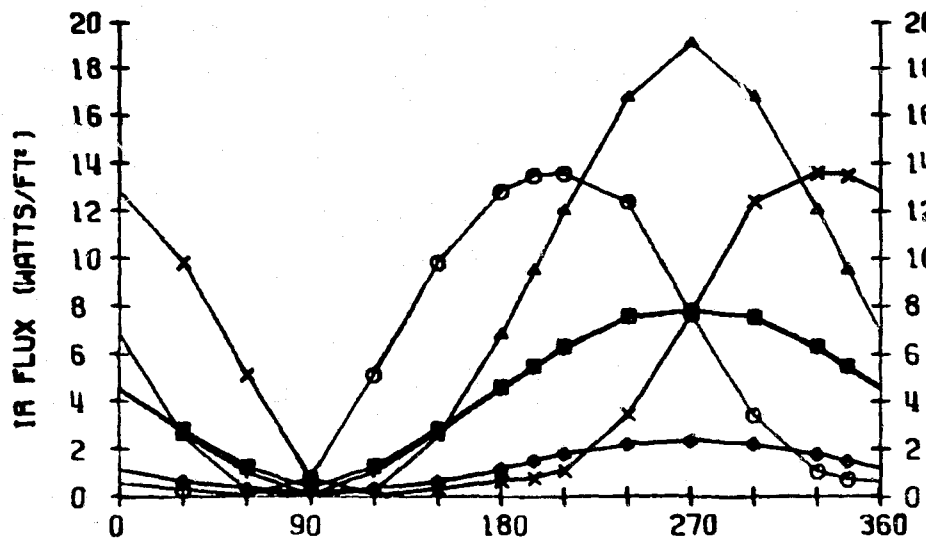
LOCATION 1

LOCATION 2

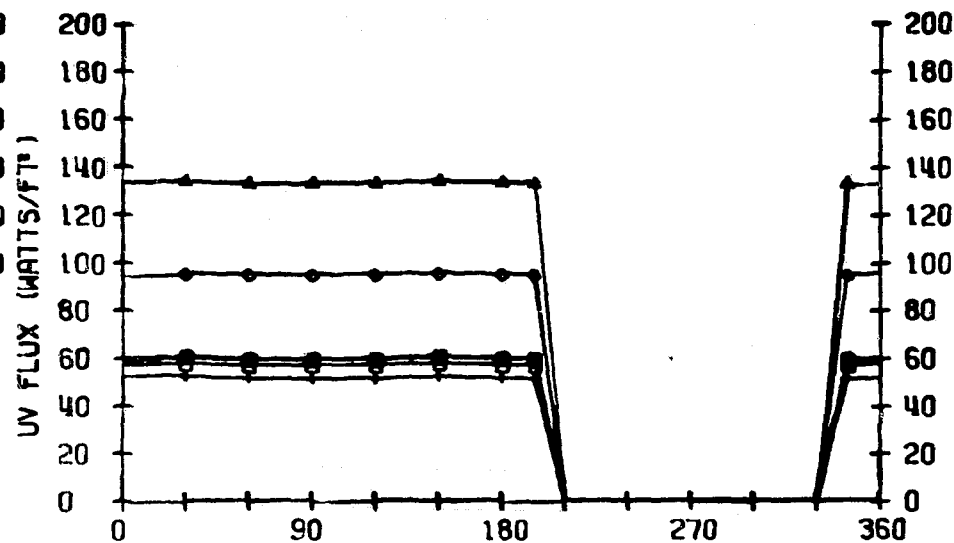
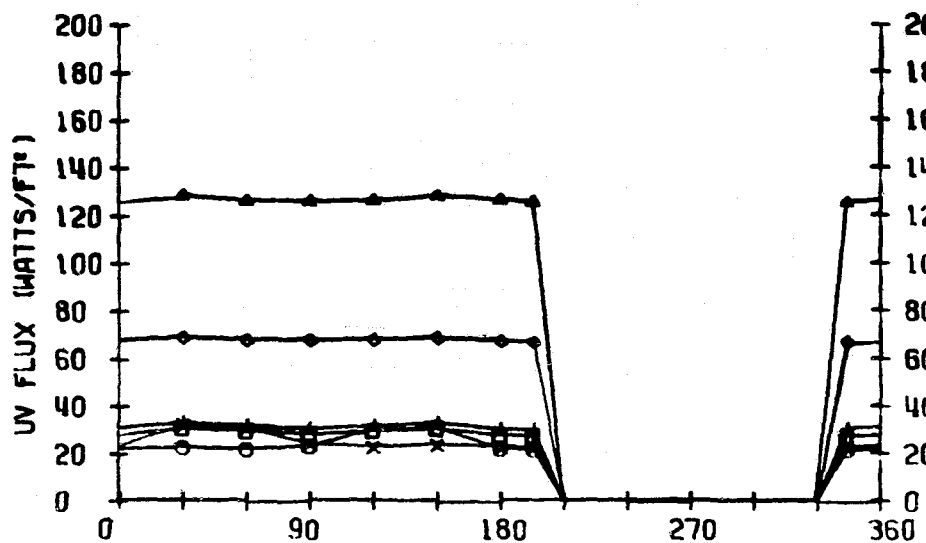
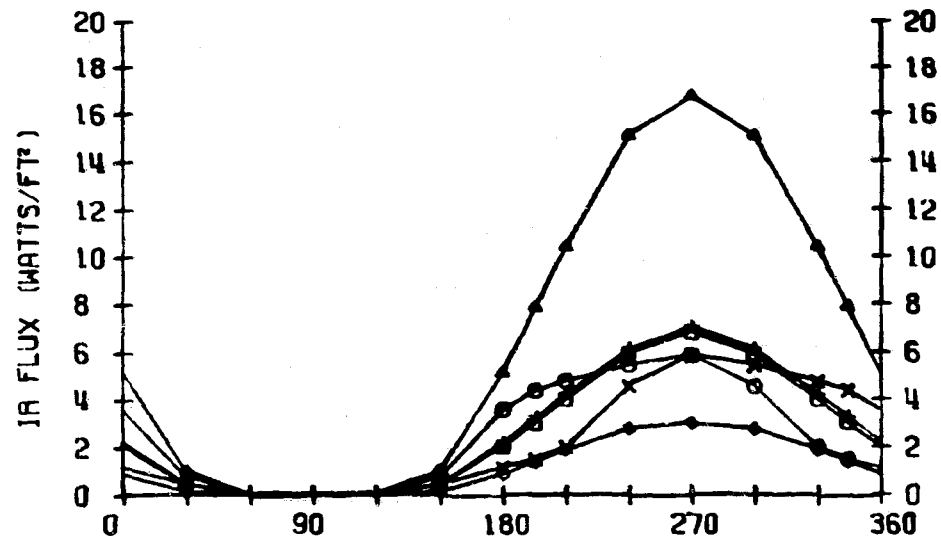


250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

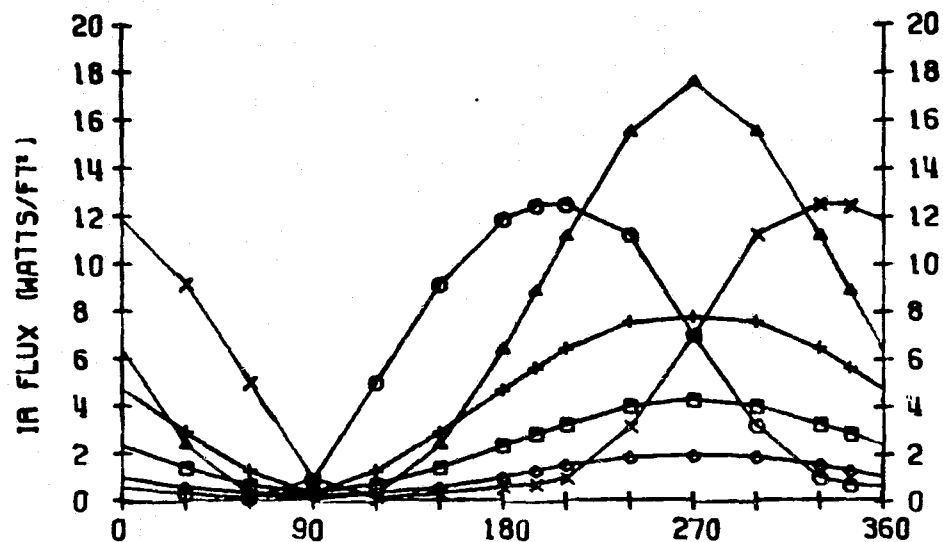


ORBIT POSITION (DEG)

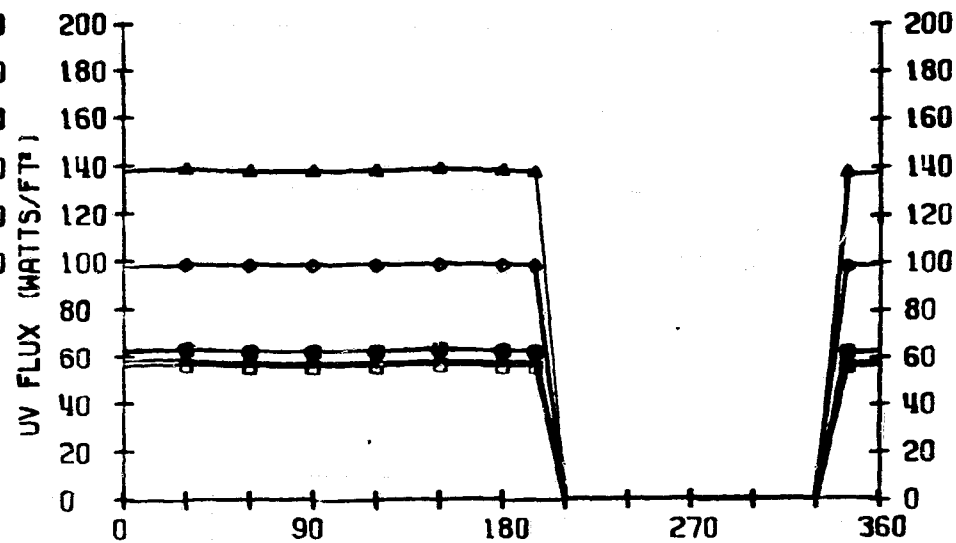
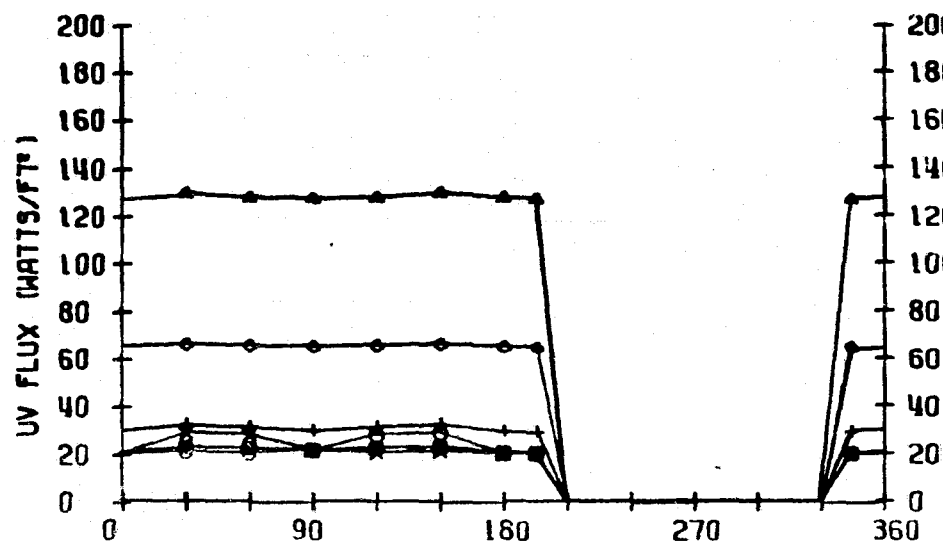
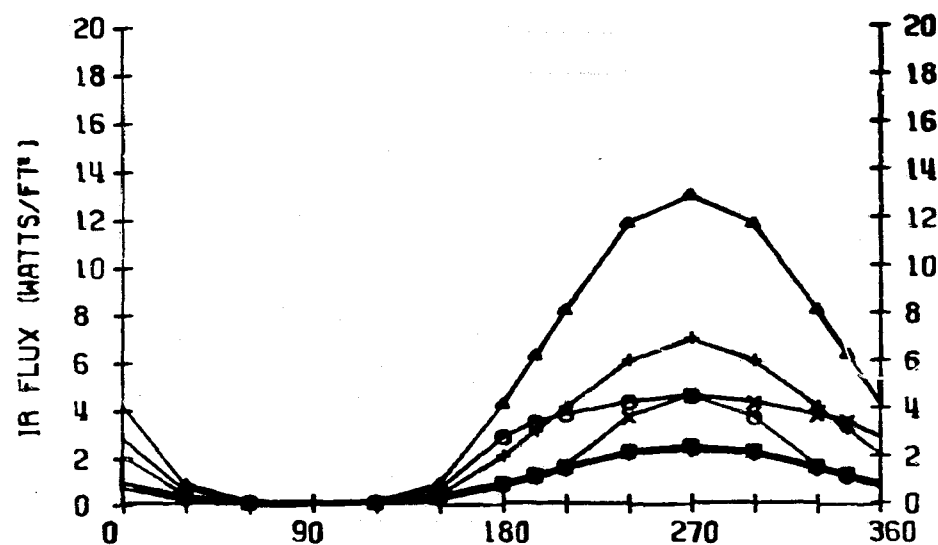
ORBIT POSITION (DEG)

250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
	SURFACE DIRECTION						
I	+X (□)	25.2	21.7	17.6	32.9	26.0	40.0
R	+Y (○)	24.7	19.2	13.4	35.5	16.4	39.9
F	+Z (△)	0.5	0.3	0.2	6.2	3.0	12.9
L	-X (+)	25.5	22.2	19.4	32.0	17.5	34.4
U	-Y (X)	24.5	20.9	13.8	35.2	16.4	39.9
X	-Z (◇)	43.6	42.1	40.2	48.2	42.8	53.9

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

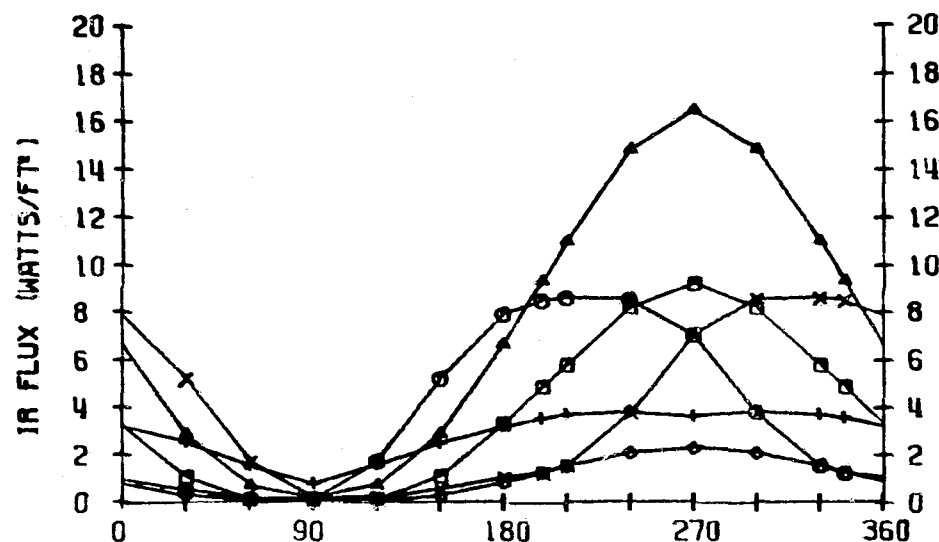
FOR

250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

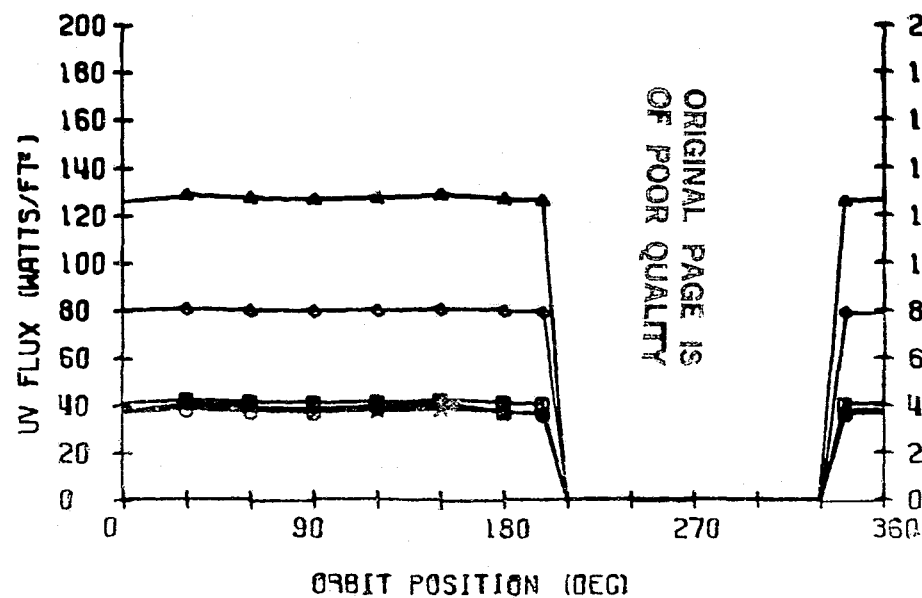
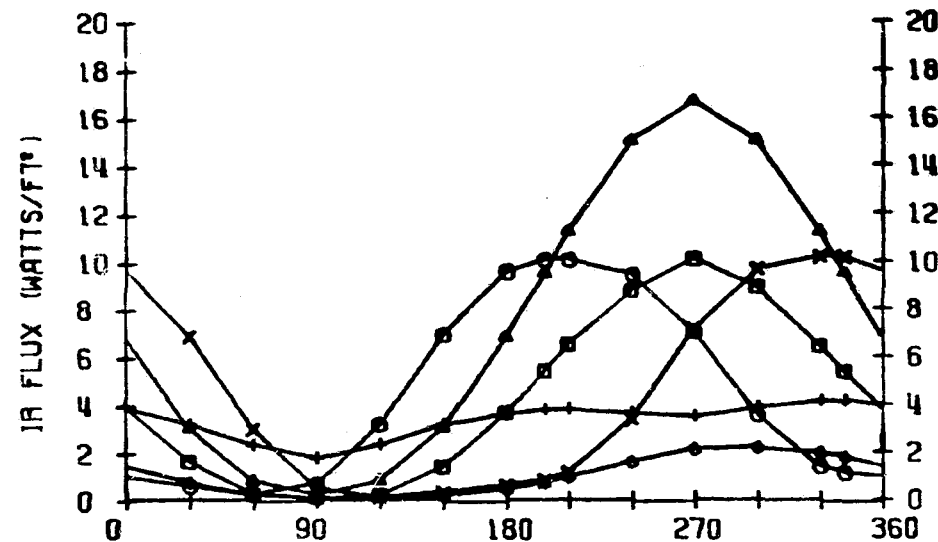
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.8	4.3	4.9	2.8	2.3	0.9
R	+Y (○)	3.8	4.5	5.6	2.3	5.1	1.7
F	+Z (Δ)	7.4	7.6	7.6	6.2	6.8	4.6
L	-X (+)	2.9	3.3	3.9	2.1	4.1	2.0
U	-Y (x)	3.8	4.4	5.6	2.3	5.1	1.7
X	-Z (◇)	1.0	1.0	1.2	1.1	0.9	0.8
U	+X (□)	24.8	19.5	16.9	34.7	13.6	34.1
V	+Y (○)	22.7	16.5	14.6	36.2	14.0	38.0
F	+Z (Δ)	76.3	76.2	76.1	80.2	77.2	83.2
L	-X (+)	23.5	20.3	20.2	31.9	19.8	35.5
U	-Y (x)	22.9	21.3	15.1	36.2	14.0	38.0
X	-Z (◇)	48.0	39.9	40.9	57.2	39.7	59.4

250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

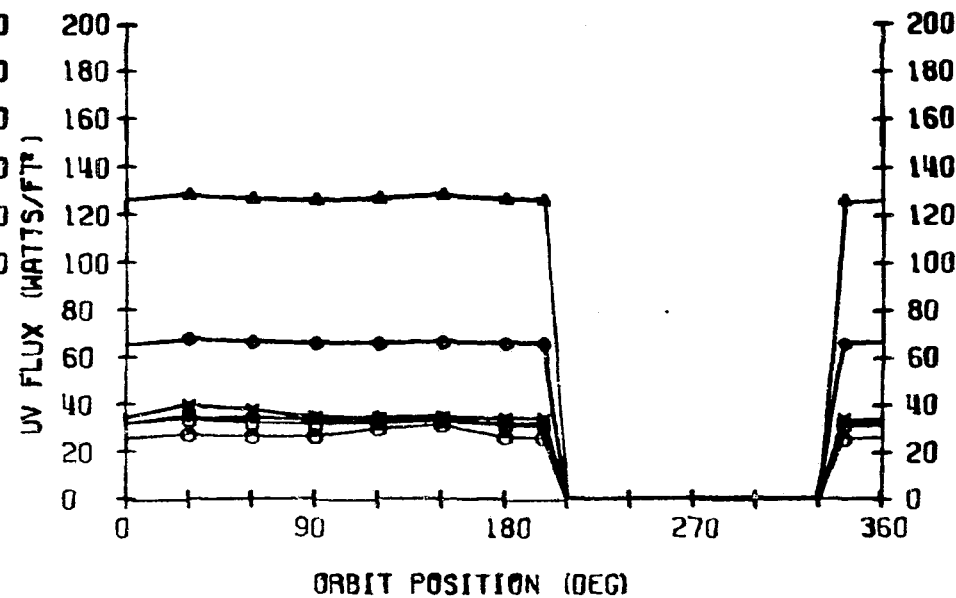
LOCATION 1



LOCATION 2



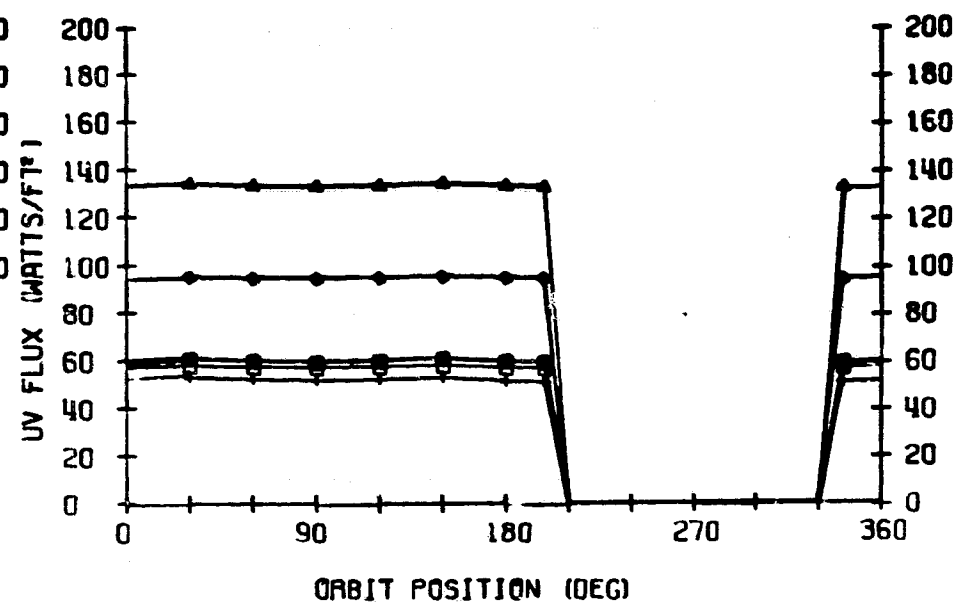
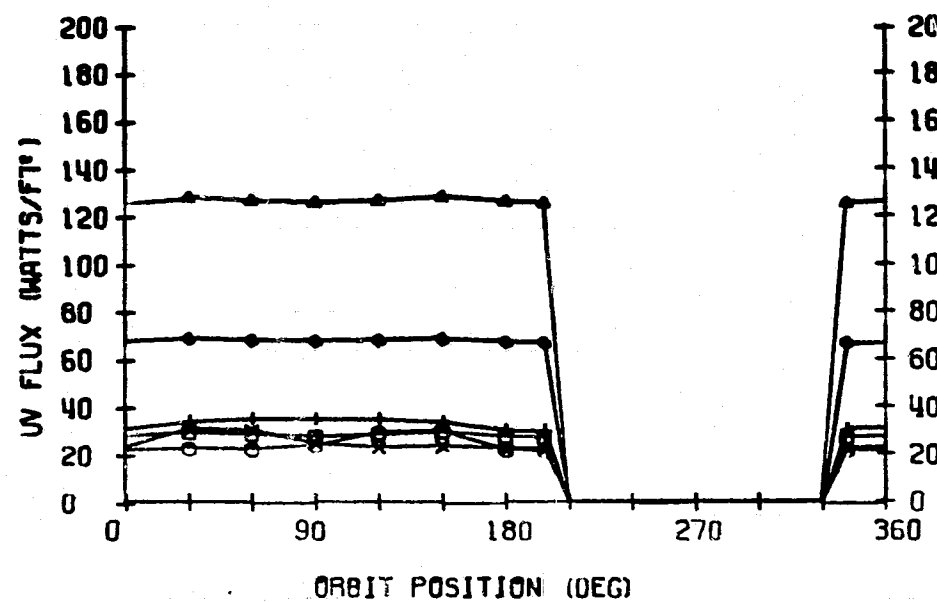
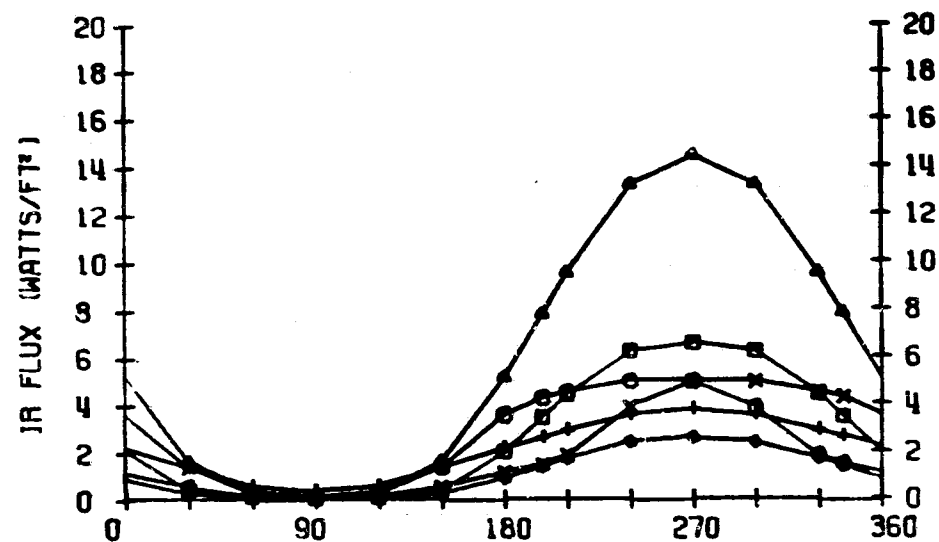
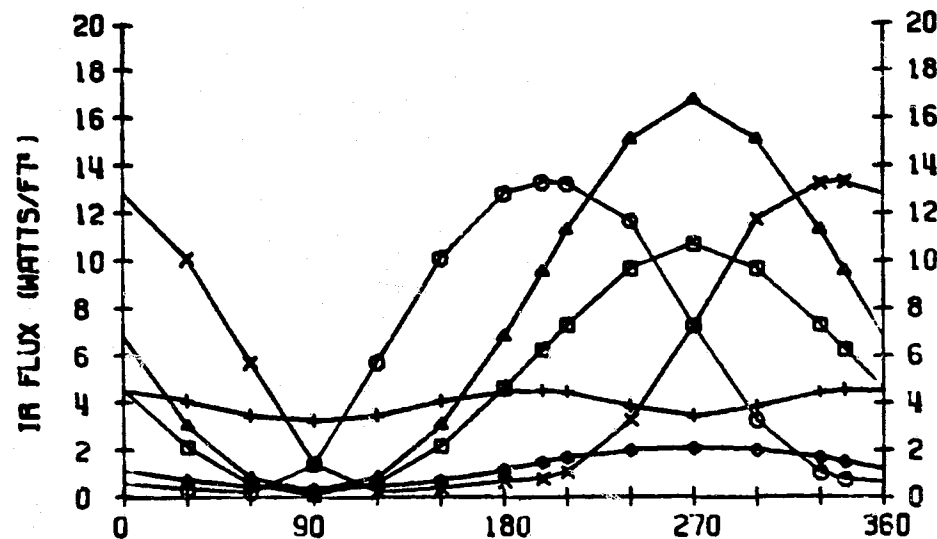
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OF POOR QUALITY



250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

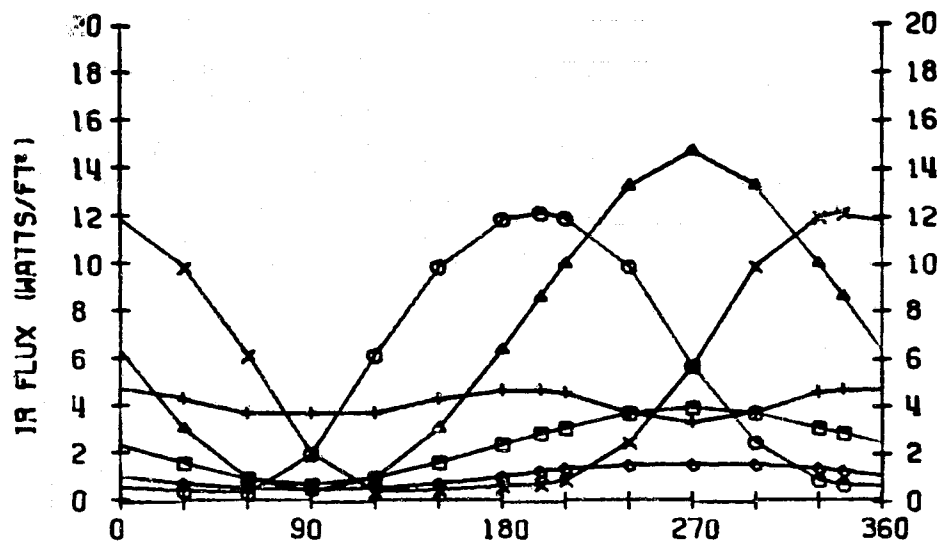
LOCATION 3

LOCATION 4

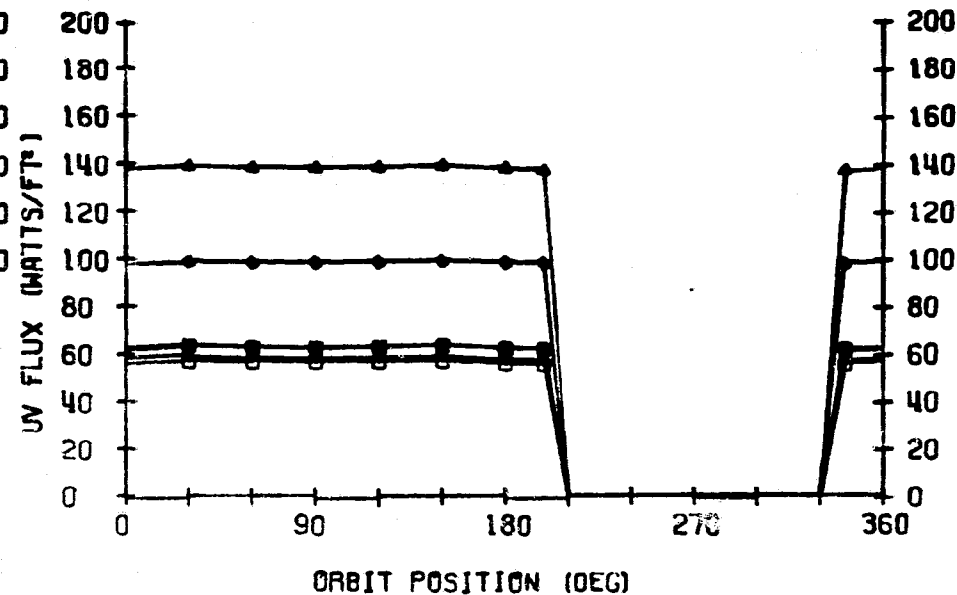
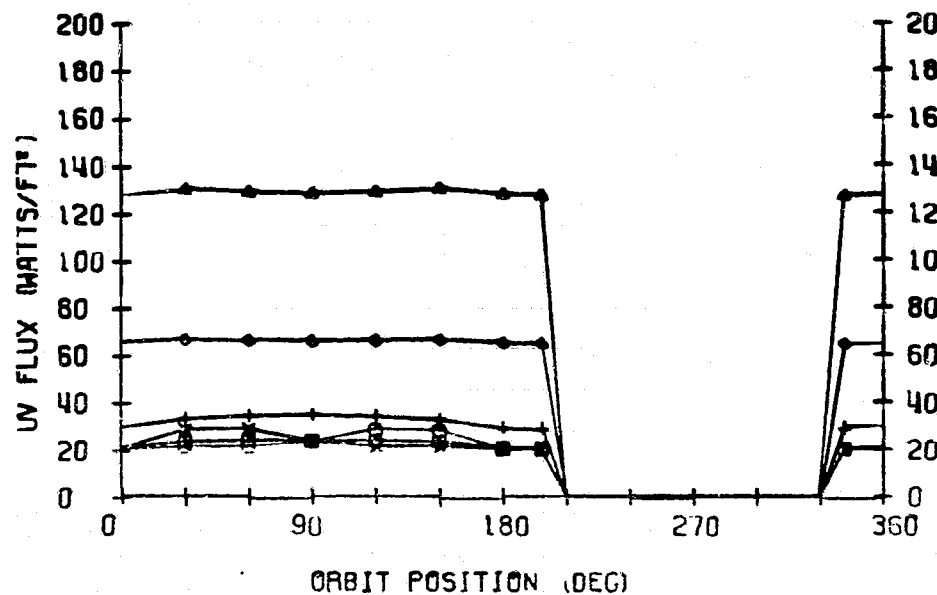
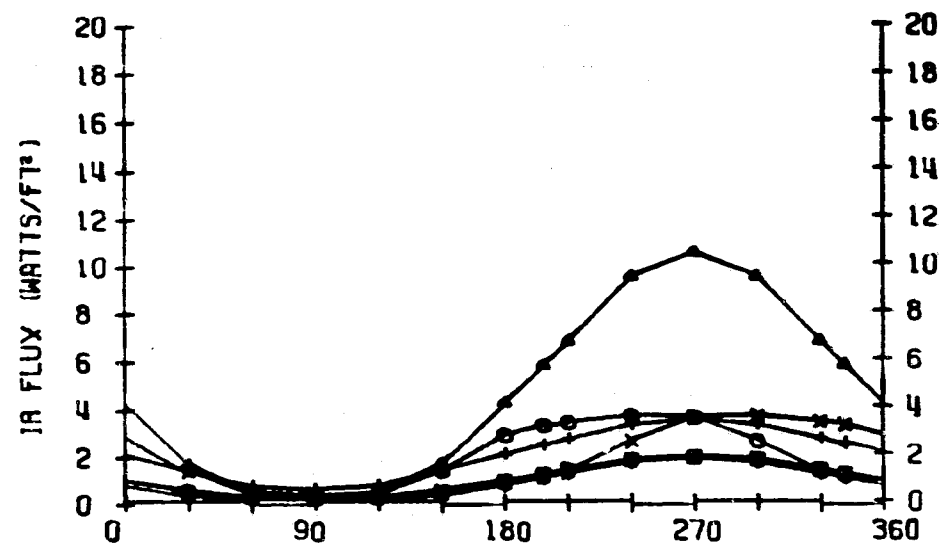


250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (*ATTS/F12)

FOR

250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	25.3	21.7	17.7	33.0	26.1	40.1
R	+Y (○)	24.8	19.5	13.4	35.6	16.4	40.0
F	+Z (△)	0.5	0.3	0.2	6.3	3.0	12.9
L	-X (+)	25.7	22.3	19.6	32.1	17.6	34.5
U	-Y (X)	24.6	21.0	13.8	35.3	16.4	40.0
X	-Z (◇)	43.8	42.2	40.4	48.3	42.9	54.0

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

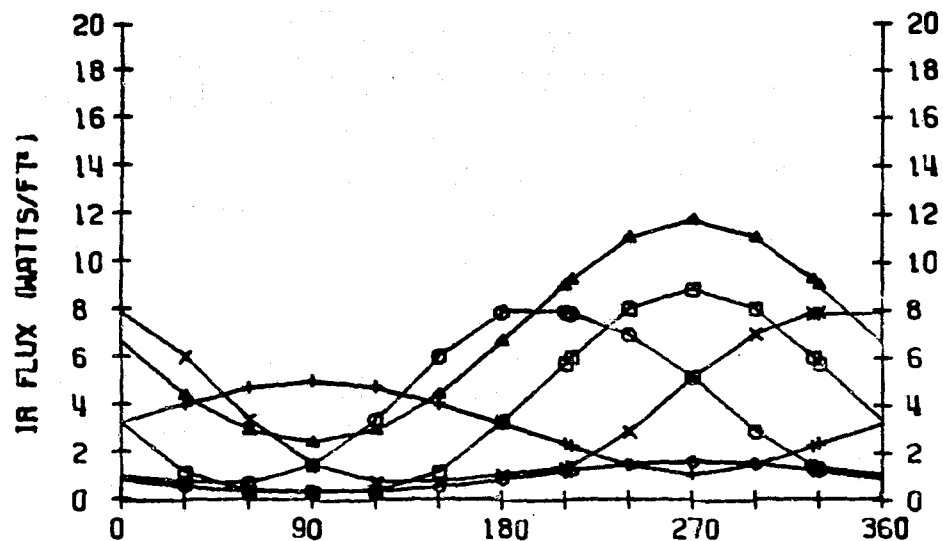
FOR

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

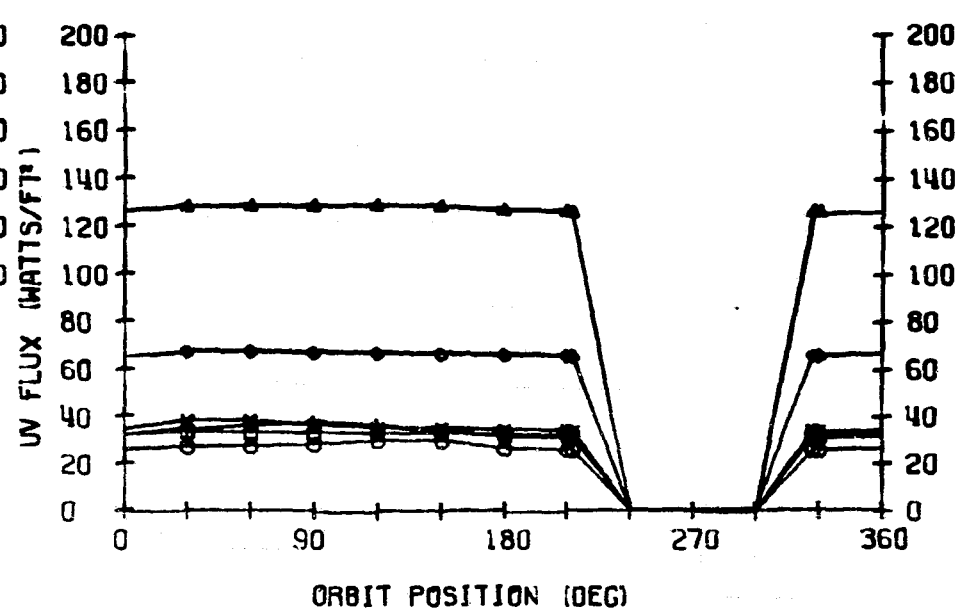
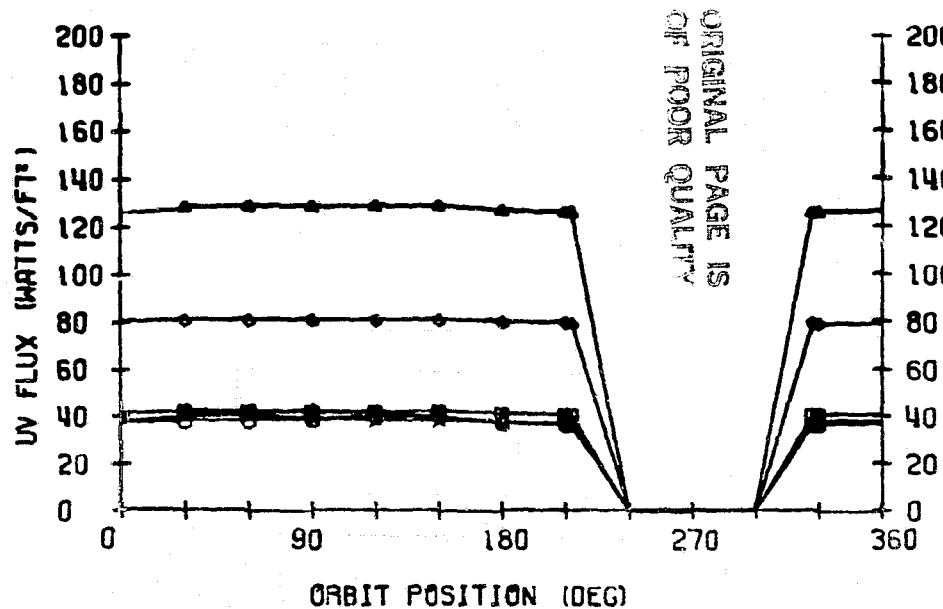
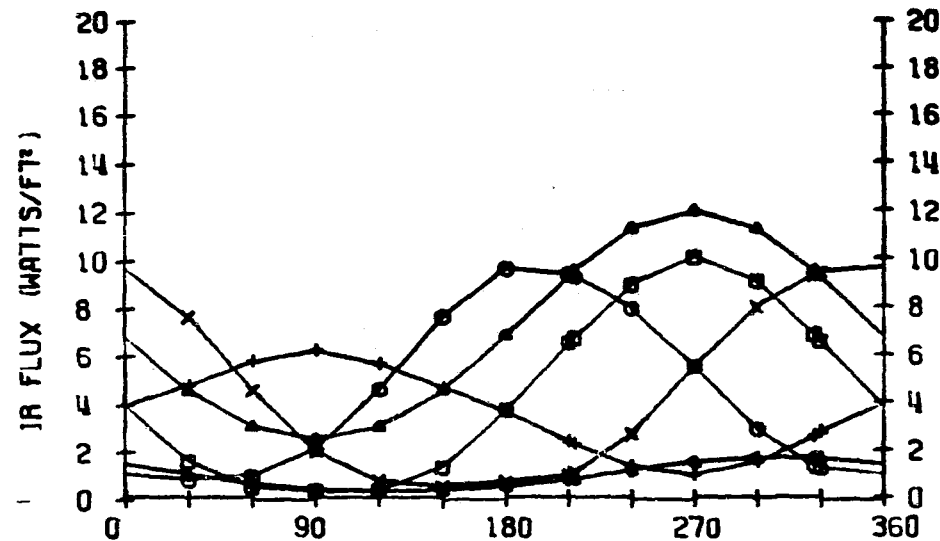
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.8	4.4	5.0	2.7	2.3	0.9
R	+Y (○)	3.8	4.5	5.6	2.1	5.1	1.6
F	+Z (Δ)	6.8	7.0	7.0	5.6	6.3	4.0
L	-X (+)	3.2	3.7	4.4	2.3	4.5	2.2
U	-Y (X)	3.8	4.4	5.6	2.1	5.1	1.6
X	-Z (◇)	0.9	0.9	1.1	1.0	0.9	0.7
U	+X (□)	28.1	22.1	19.0	39.5	15.3	39.0
V	+Y (○)	25.8	18.5	16.0	41.3	15.3	43.3
F	+Z (Δ)	86.8	86.7	86.7	91.4	87.9	94.8
L	-X (+)	27.2	23.3	23.0	36.8	22.5	40.9
U	-Y (X)	25.9	24.1	16.6	41.3	15.3	43.3
X	-Z (◇)	54.6	45.4	46.4	65.2	45.1	67.7

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



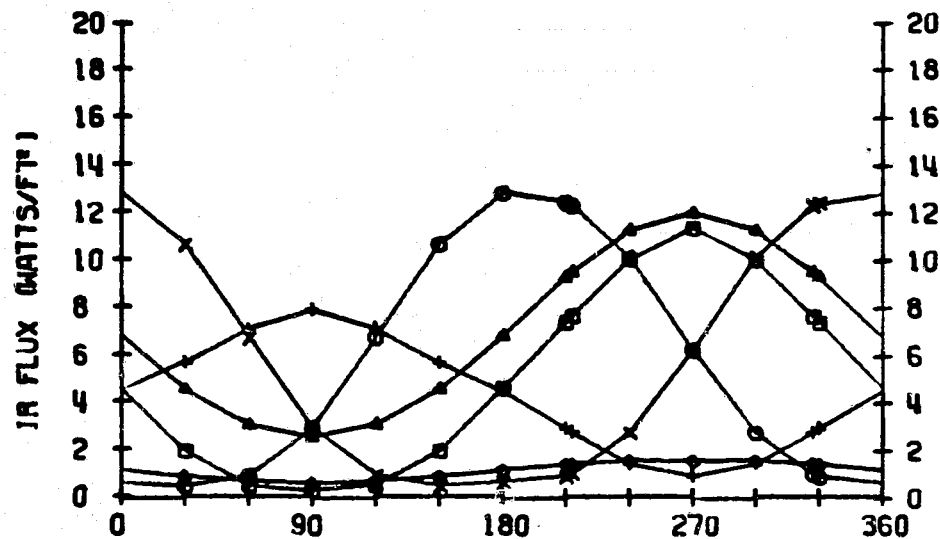
LOCATION 2



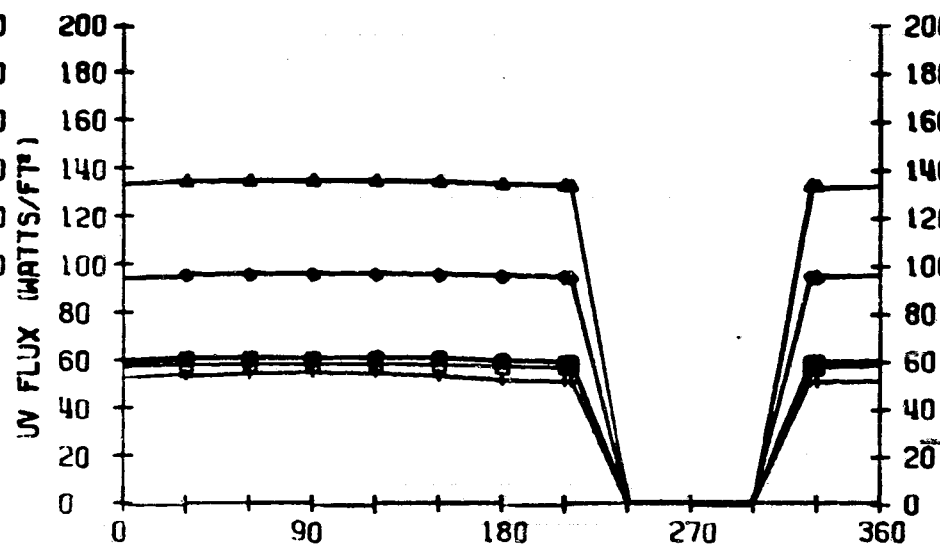
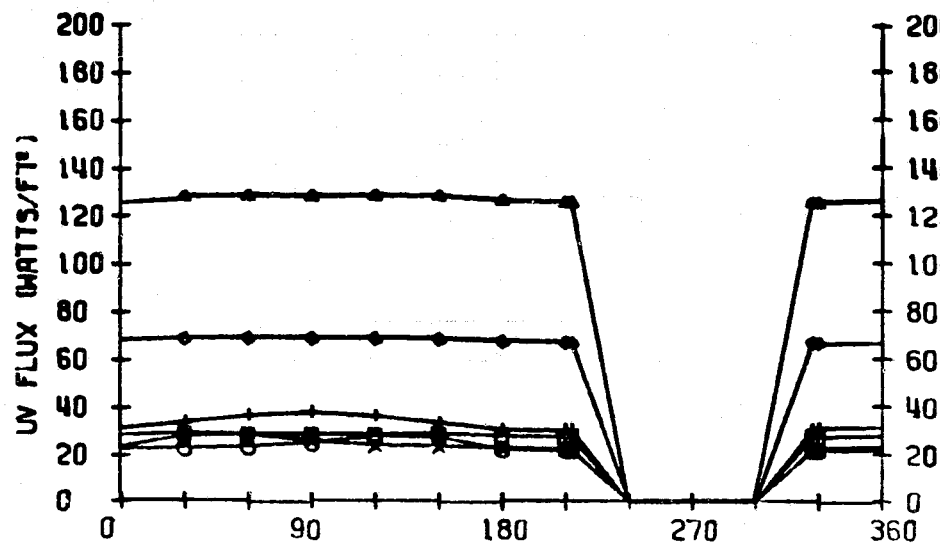
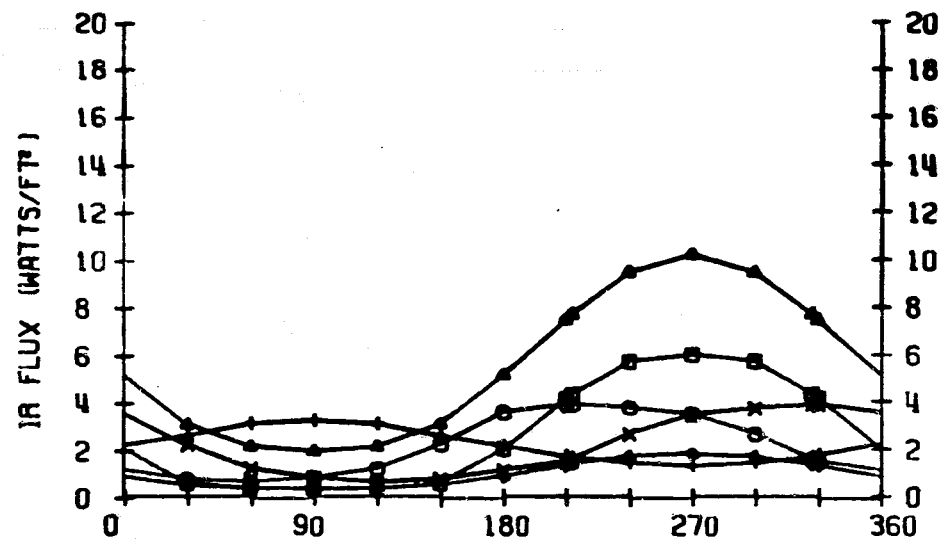
ORIGINAL PAGE IS
OF POOR QUALITY

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

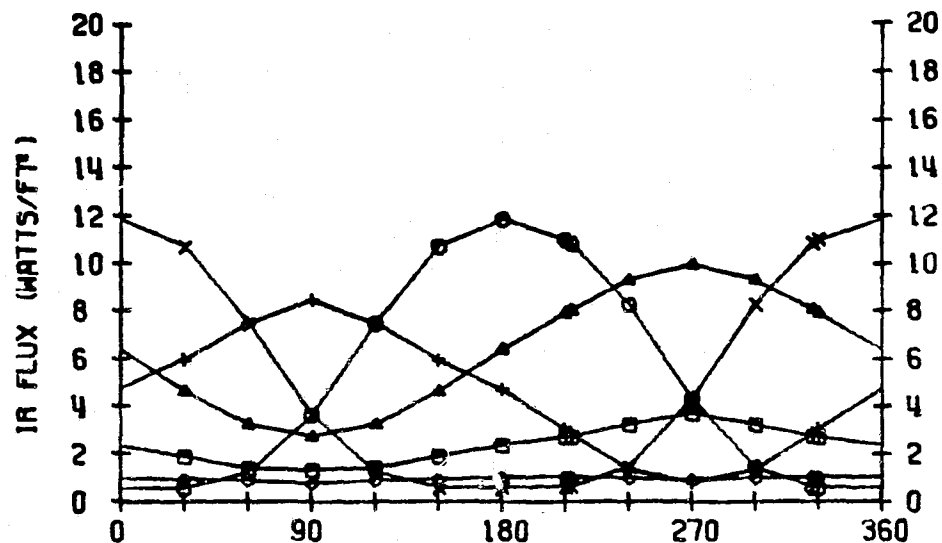


ORBIT POSITION (DEG)

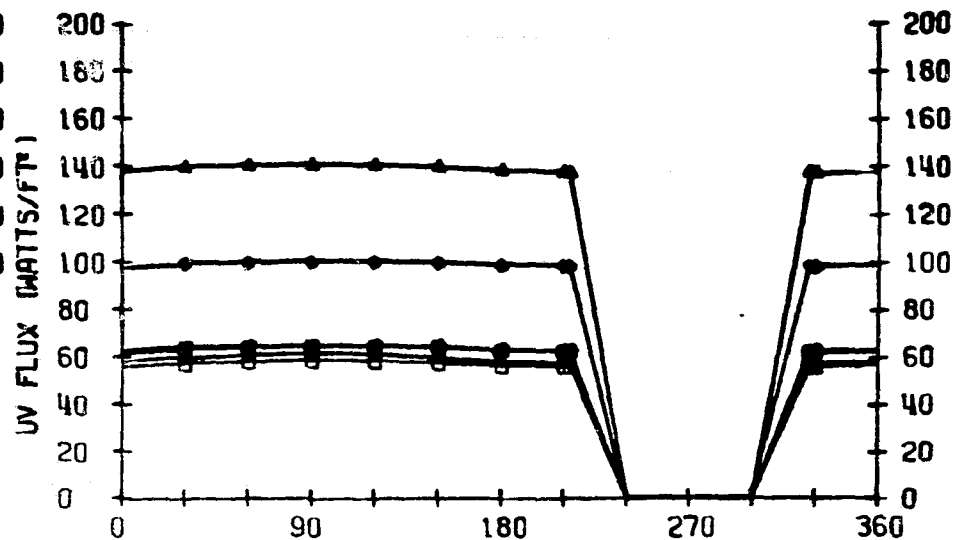
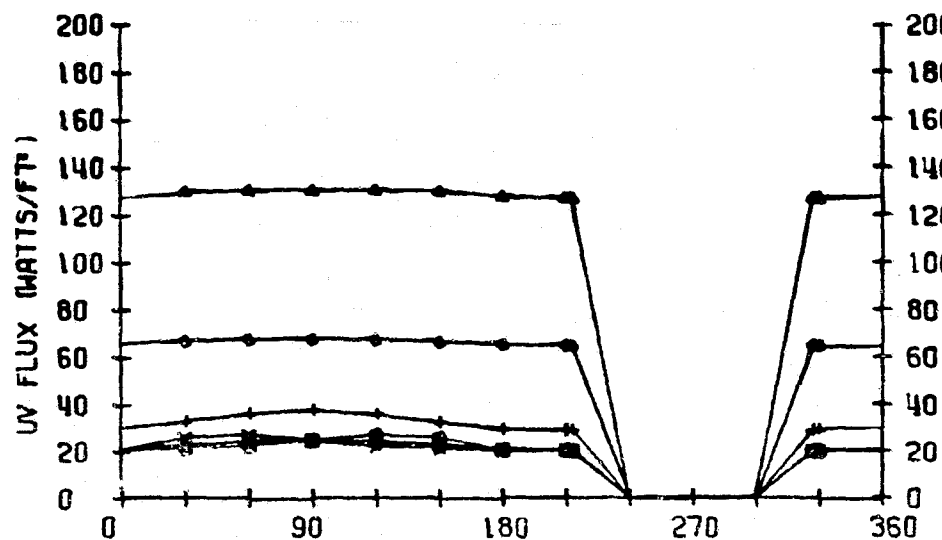
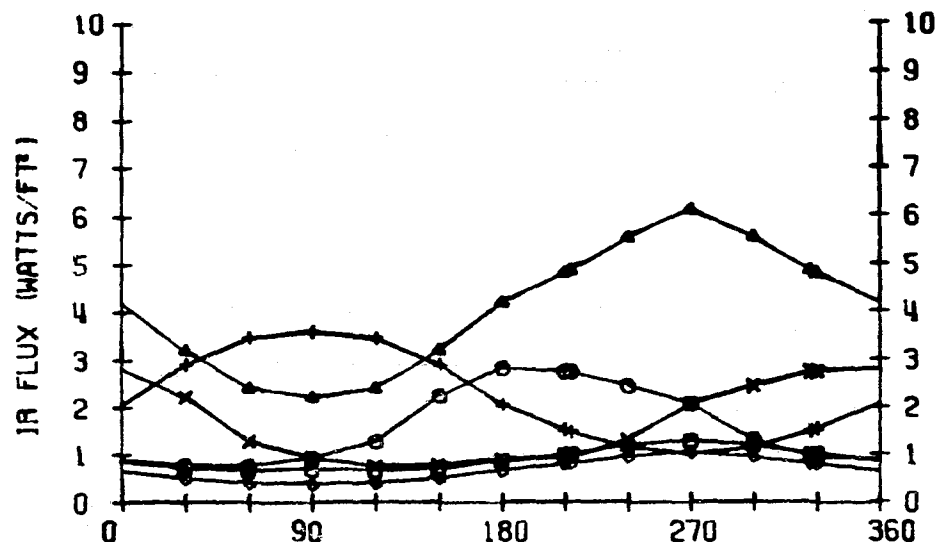
ORBIT POSITION (DEG)

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
I	+X (□)	29.3	25.1	20.5	38.2	30.3	46.6
R	+Y (○)	28.6	22.2	15.5	41.2	19.0	46.5
F	+Z (△)	0.6	0.4	0.3	7.2	3.5	15.0
L	-X (+)	29.7	25.7	22.6	37.1	20.3	40.0
U	-Y (X)	28.4	24.3	15.9	40.8	19.0	46.5
X	-Z (◇)	50.6	48.7	46.7	56.0	49.8	62.9

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

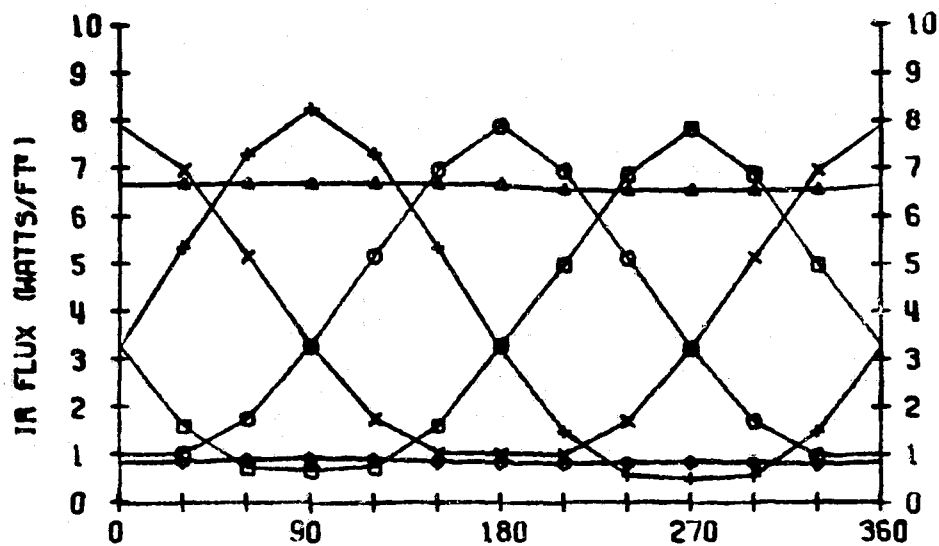
FOR

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

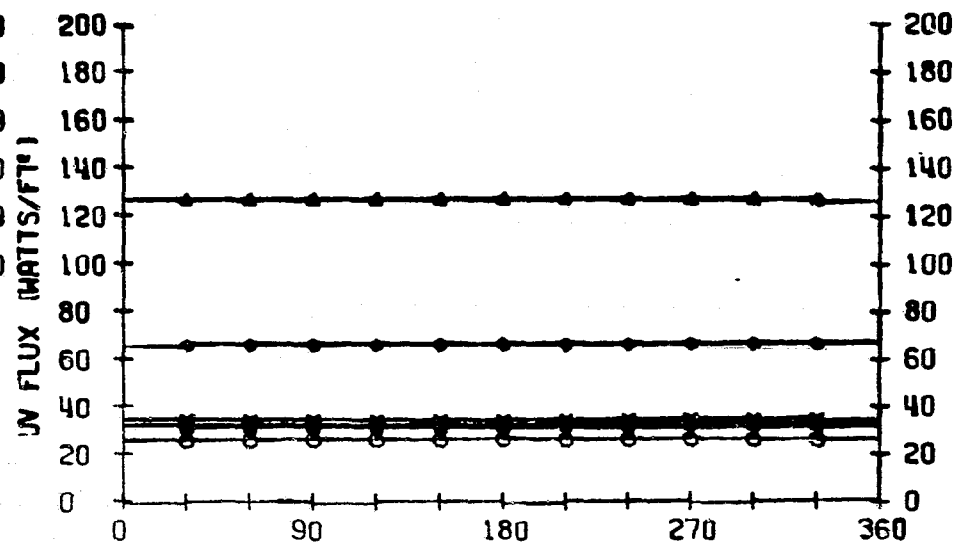
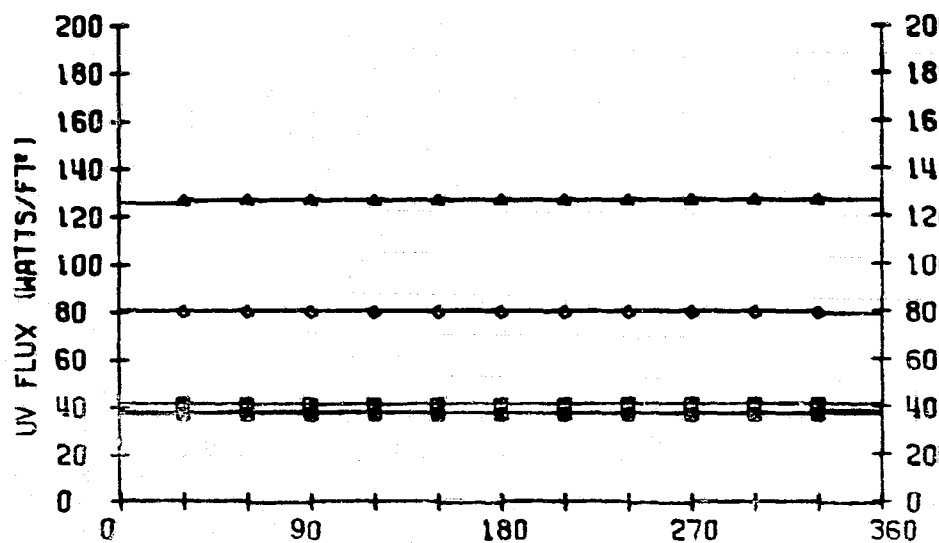
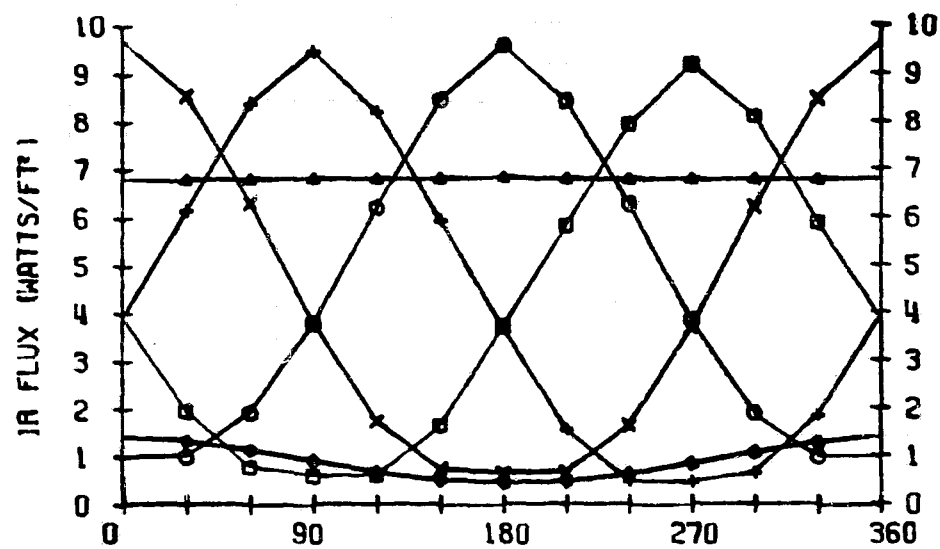
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.6	4.2	4.8	2.5	2.2	0.9
R	+Y (○)	3.7	4.4	5.6	2.1	5.2	1.6
F	+Z (Δ)	6.6	6.8	6.8	5.3	6.1	4.0
L	-X (+)	3.7	4.2	4.9	2.7	5.1	2.8
U	-Y (χ)	3.8	4.3	5.6	2.1	5.2	1.6
X	-Z (◇)	0.8	0.9	1.1	0.9	0.9	0.7
U	+X (□)	40.8	31.9	27.3	57.5	20.6	56.0
V	+Y (○)	36.7	25.7	21.8	59.8	20.3	62.4
F	+Z (Δ)	126.3	126.0	126.0	133.2	127.5	137.7
L	-X (+)	37.8	31.7	30.8	52.5	29.8	58.2
U	-Y (χ)	36.9	34.0	22.6	59.9	20.3	62.4
X	-Z (◇)	79.5	65.9	67.4	95.1	65.1	98.5

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

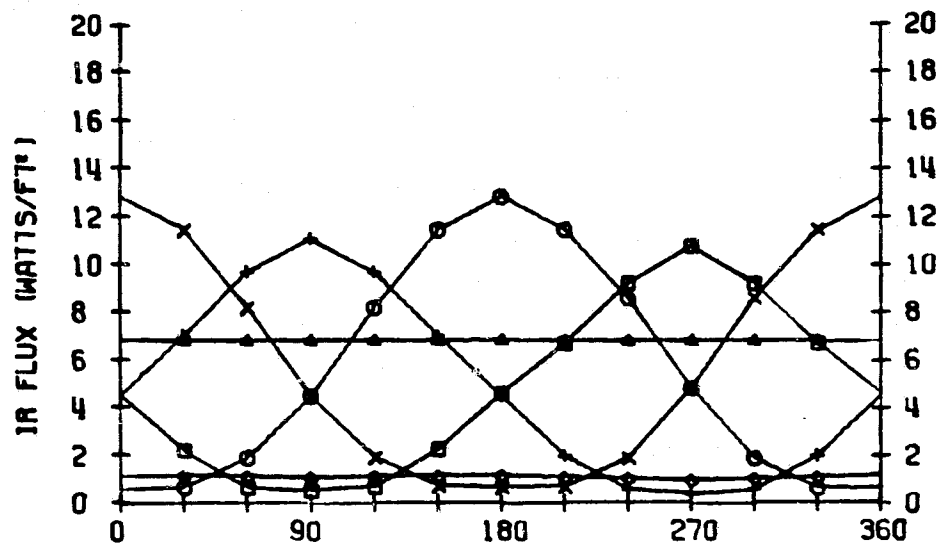


ORBIT POSITION (DEG)

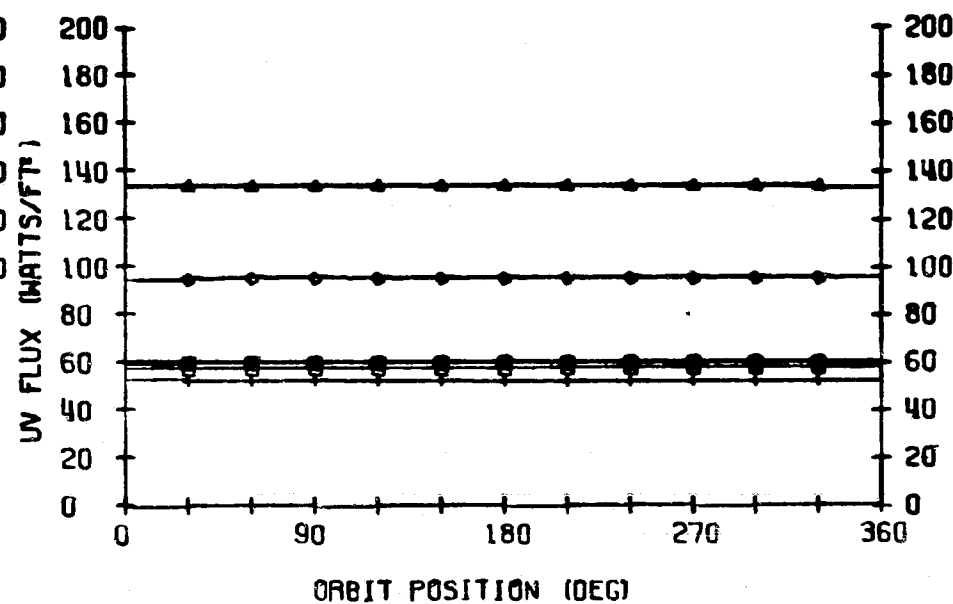
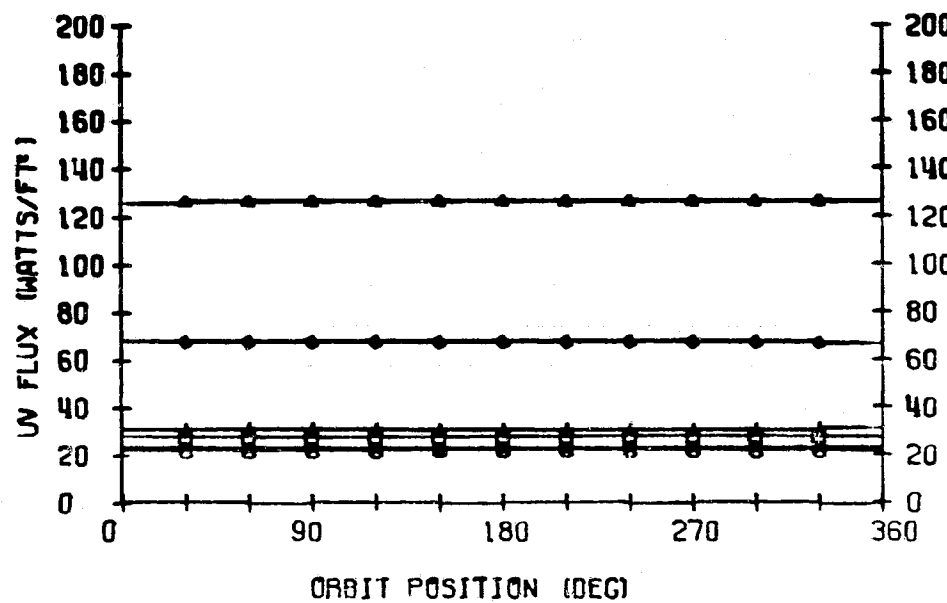
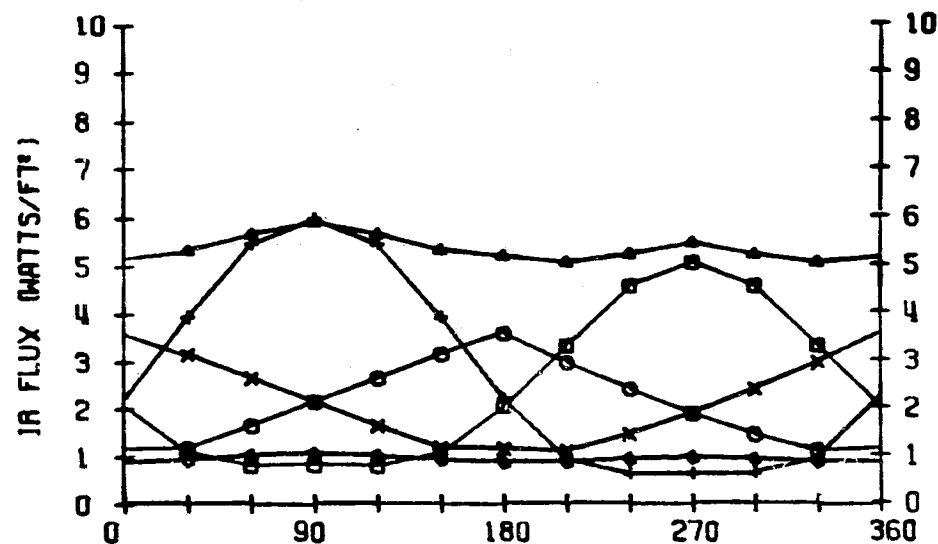
ORBIT POSITION (DEG)

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

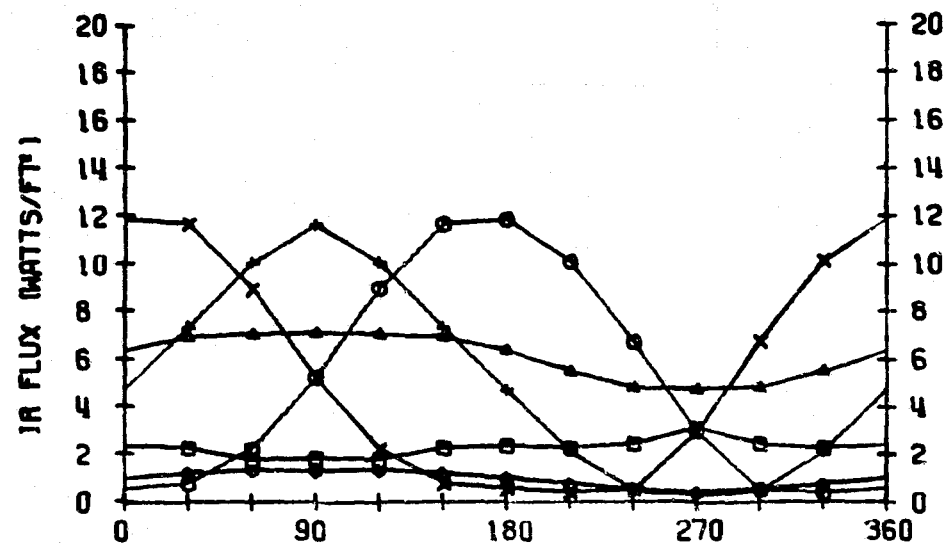


LOCATION 4

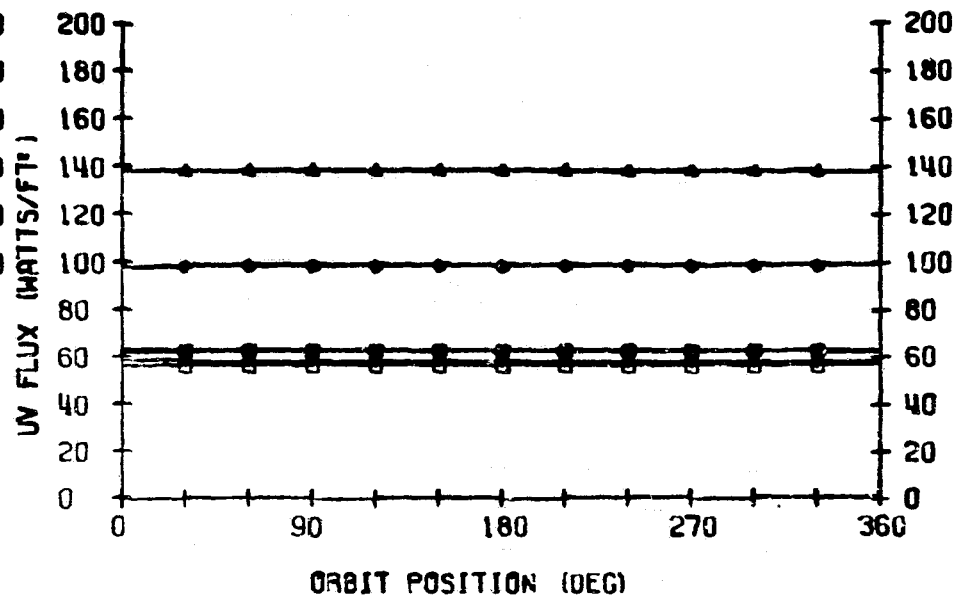
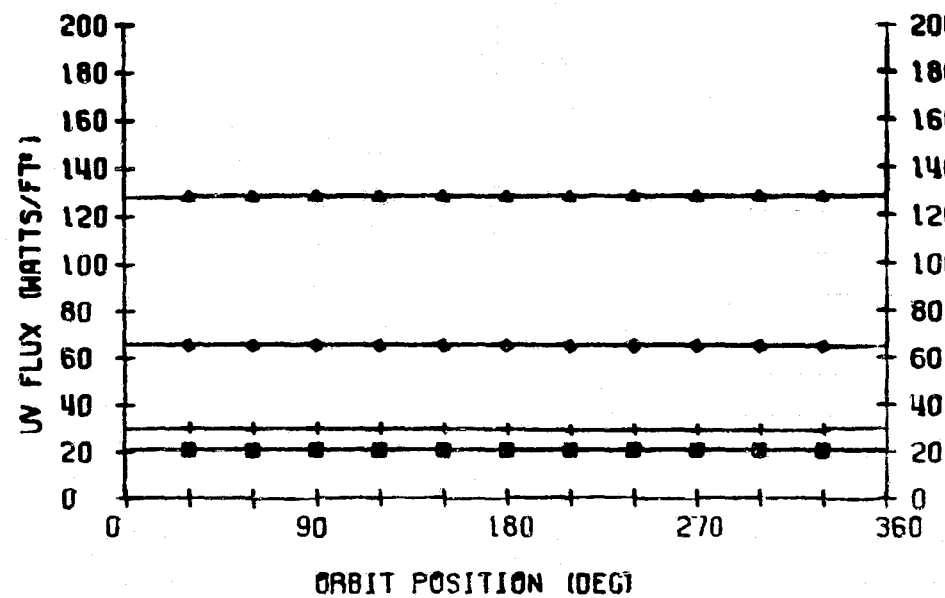
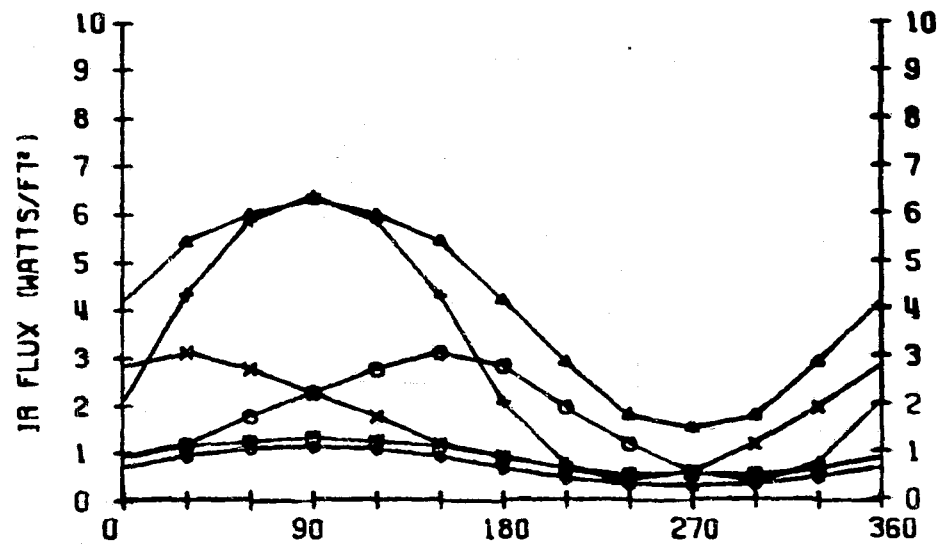


250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
	SURFACE DIRECTION						
I	+X (□)	37.0	31.7	25.8	48.5	37.8	58.9
R	+Y (○)	36.2	27.9	19.5	52.2	23.9	59.1
F	+Z (△)	0.8	0.5	0.3	9.1	4.3	18.7
L	-X (+)	37.6	32.5	28.6	47.1	25.7	51.0
U	-Y (×)	35.8	30.8	20.1	51.8	23.9	59.1
X	-Z (◇)	64.4	61.7	59.2	71.3	63.1	80.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

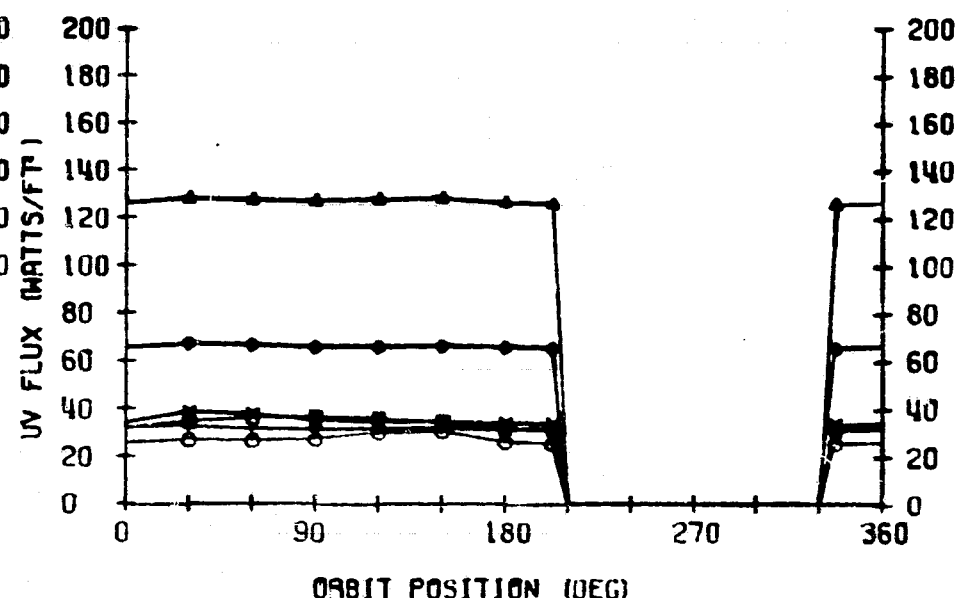
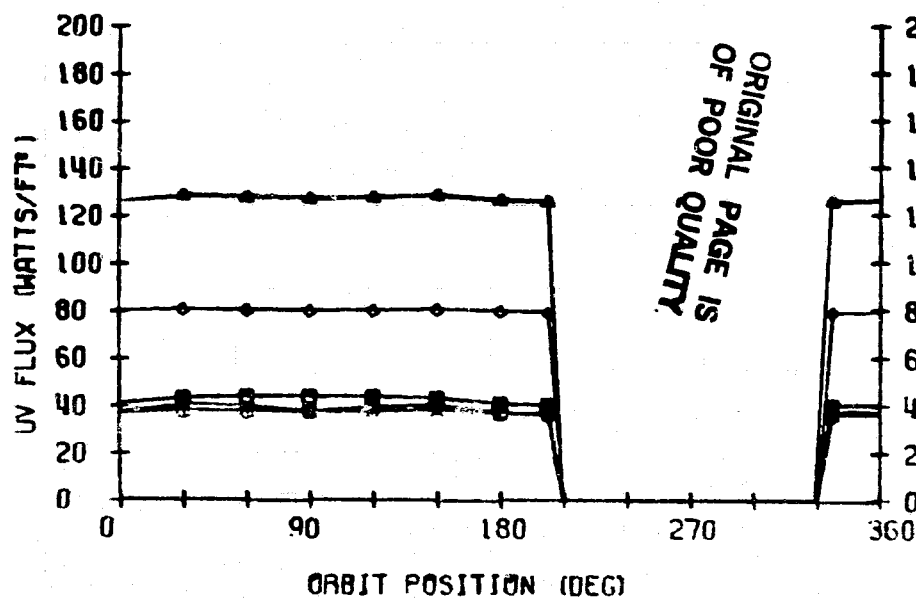
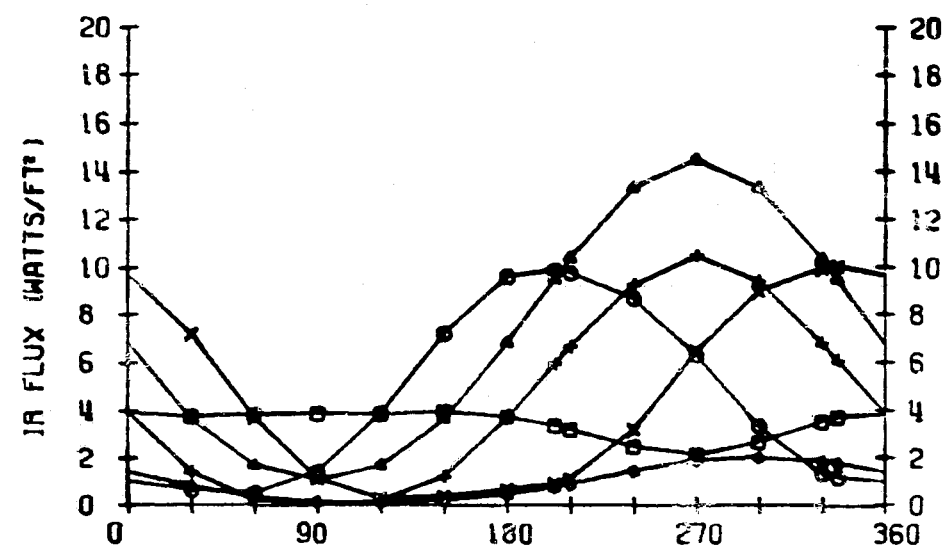
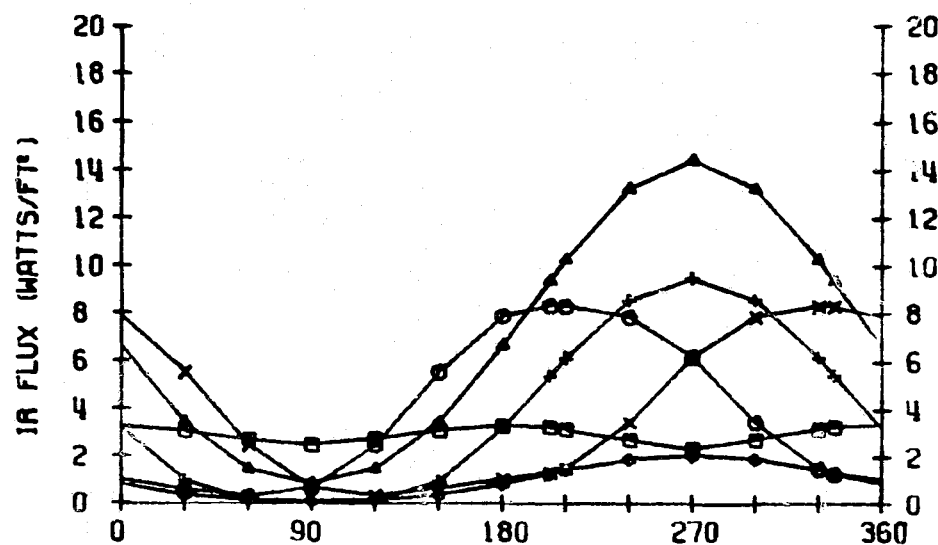
250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	2.9	3.4	4.0	1.9	2.1	1.0
R	+Y (○)	3.8	4.5	5.6	2.2	5.2	1.9
F	+Z (Δ)	7.1	7.3	7.3	5.9	6.9	5.2
L	-X (+)	4.0	4.5	5.1	3.0	5.3	3.1
U	-Y (X)	3.8	4.4	5.6	2.2	5.2	1.9
X	-Z (◇)	0.9	0.9	1.1	1.0	1.0	0.9
U	+X (□)	26.6	21.5	19.1	36.4	13.3	35.0
V	+Y (○)	23.6	17.1	15.1	37.7	13.7	39.1
F	+Z (Δ)	79.4	79.3	79.3	83.5	79.9	86.0
L	-X (+)	23.8	20.1	19.5	32.9	18.9	36.4
U	-Y (X)	23.8	22.1	15.6	37.7	13.7	39.1
X	-Z (◇)	49.9	41.5	42.4	59.5	40.8	61.5

250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

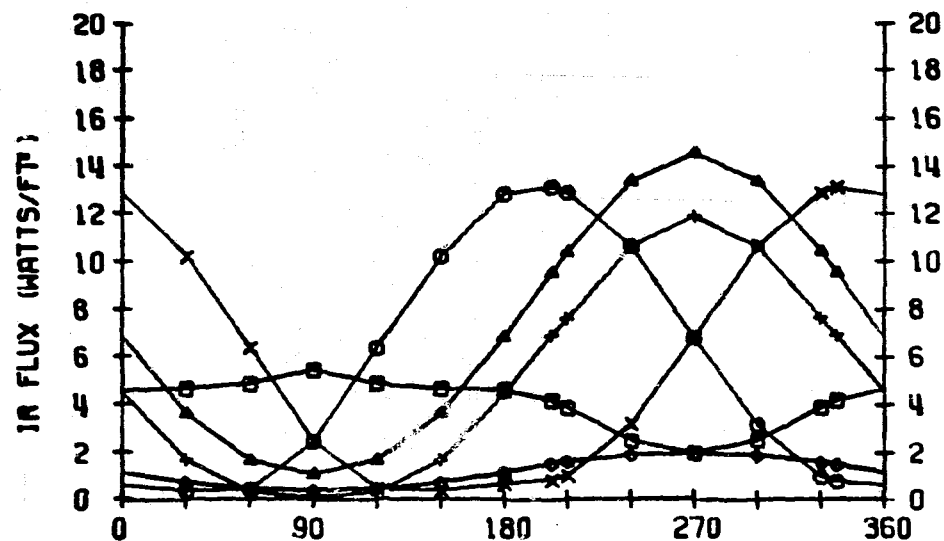
LOCATION 2



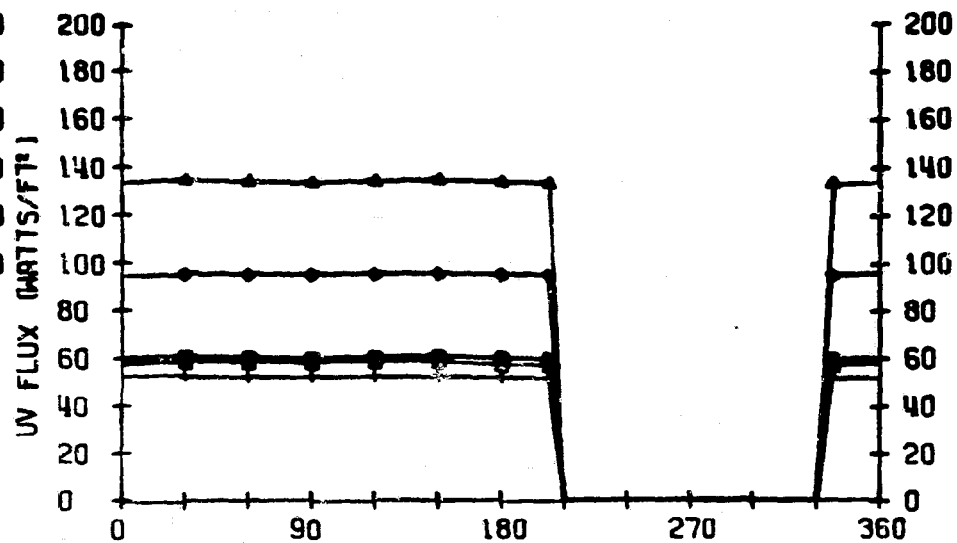
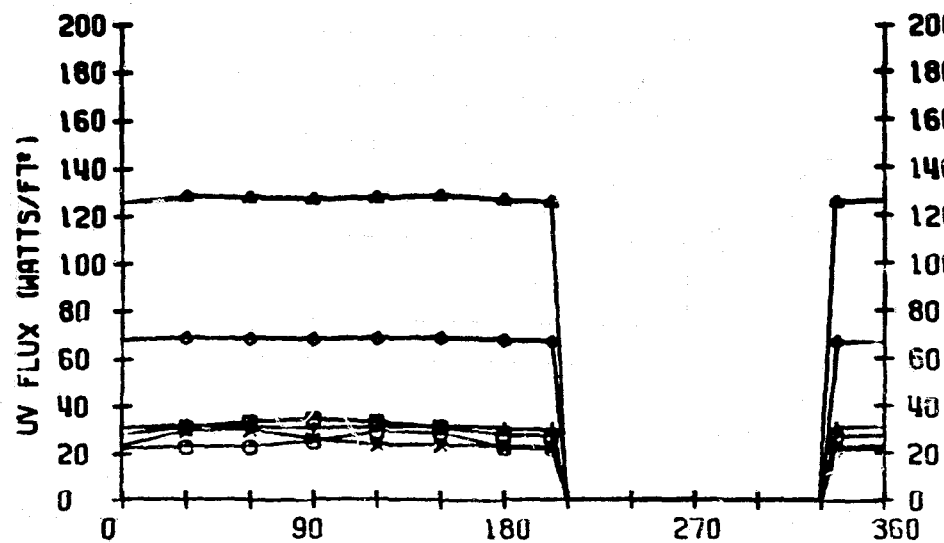
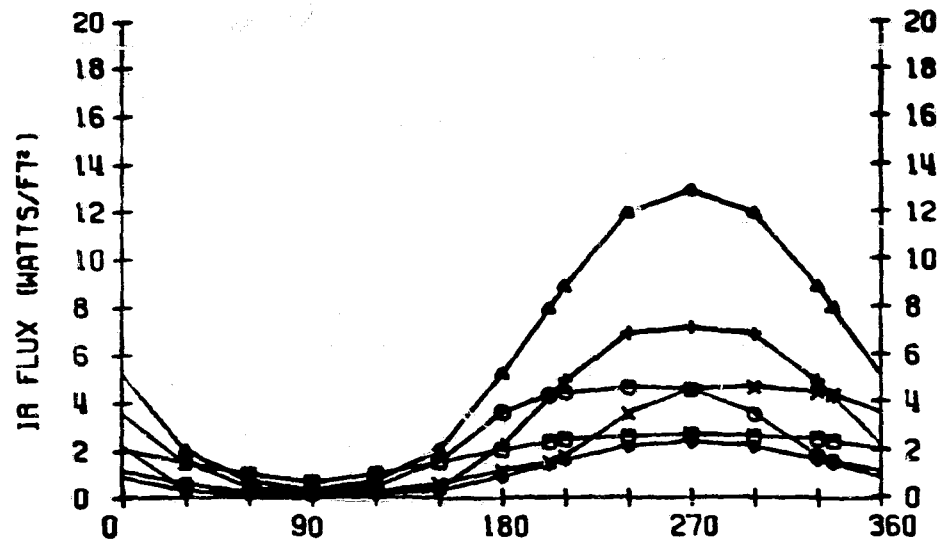
ORIGINAL
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QUALITY

250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

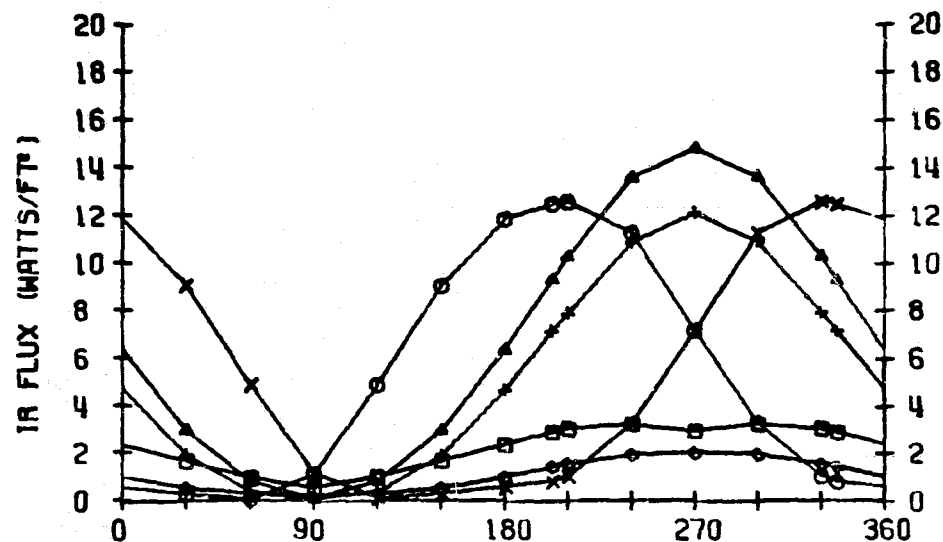


ORBIT POSITION (DEG)

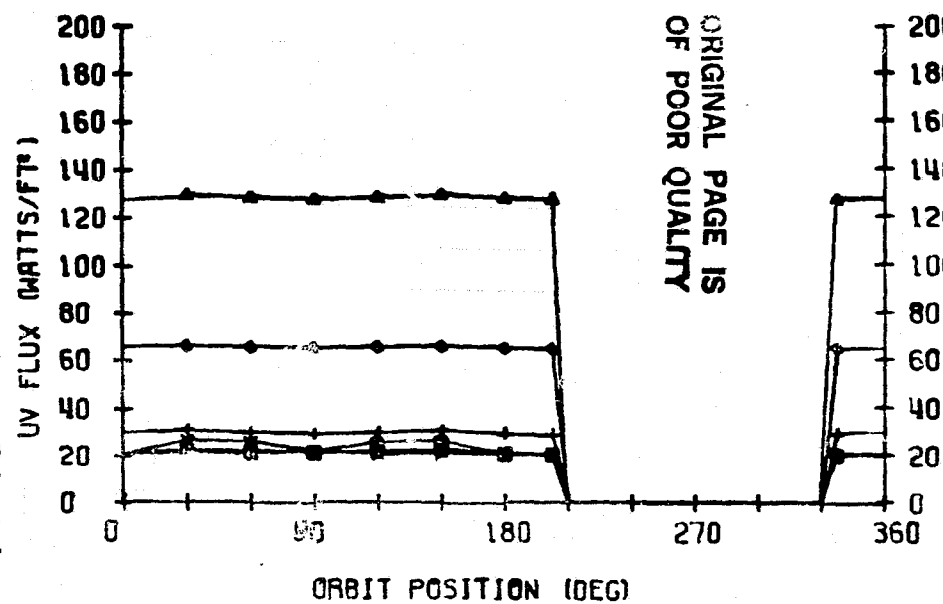
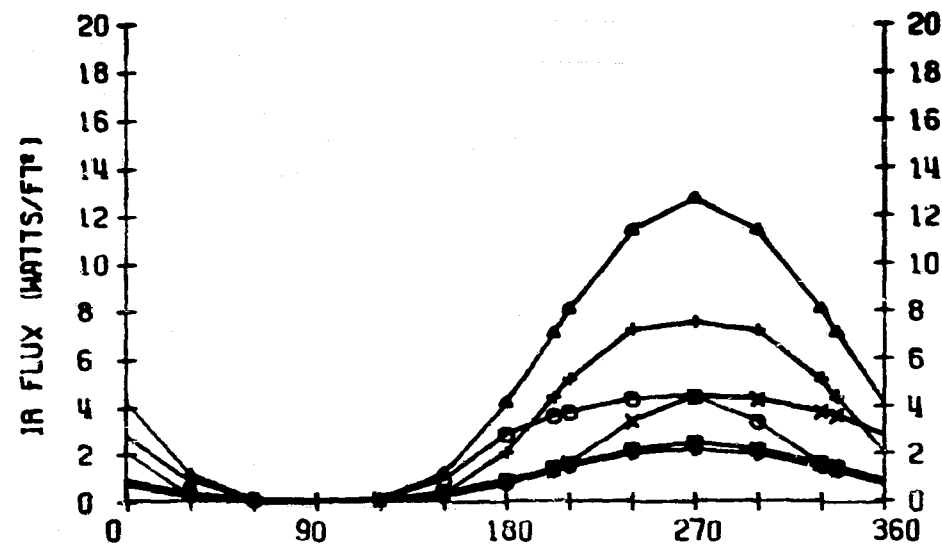
ORBIT POSITION (DEG)

250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

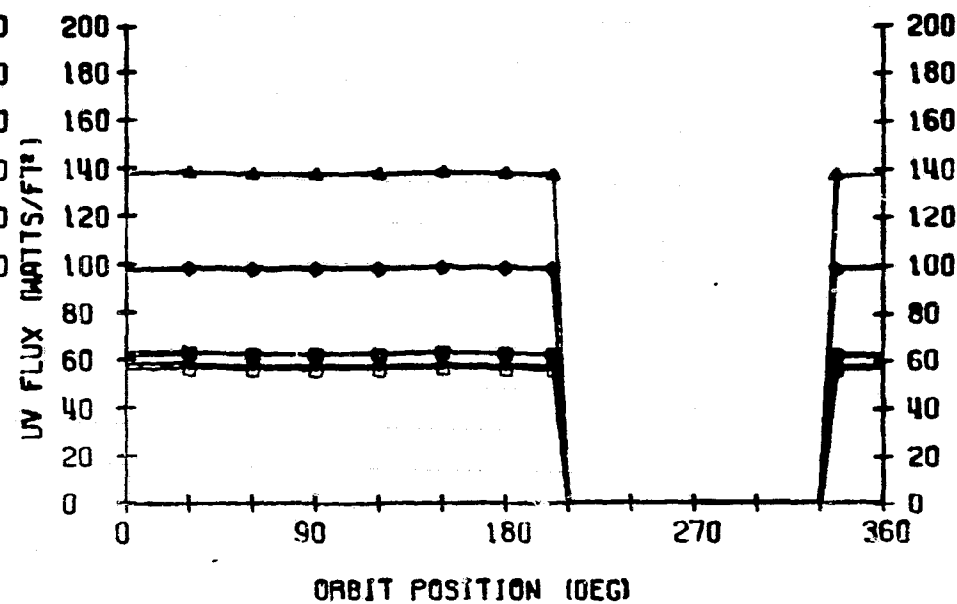
LOCATION 5



LOCATION 6



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ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	25.7	22.1	18.0	33.4	26.8	41.1
R	+Y (○)	25.1	19.5	13.6	36.0	16.8	40.9
F	+Z (△)	0.5	0.4	0.2	6.3	3.1	13.2
L	-X (+)	25.9	22.5	19.8	32.4	17.8	35.2
U	-Y (X)	24.4	21.3	14.0	35.7	16.8	40.9
X	-Z (◇)	44.2	42.7	40.8	48.9	43.8	55.3

FLUX DATA
FOR
ALTITUDE - 250 km
ORIENTATION NO. 4

Bay 45° to sun, tail facing north ecliptic pole

Beta angles - 0°, 30°, 60°, 90°, -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

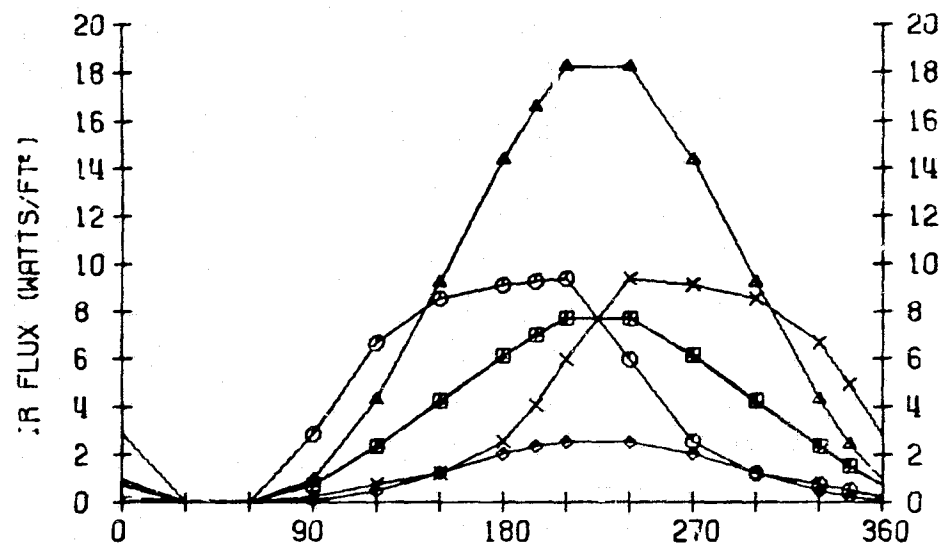
FOR

250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

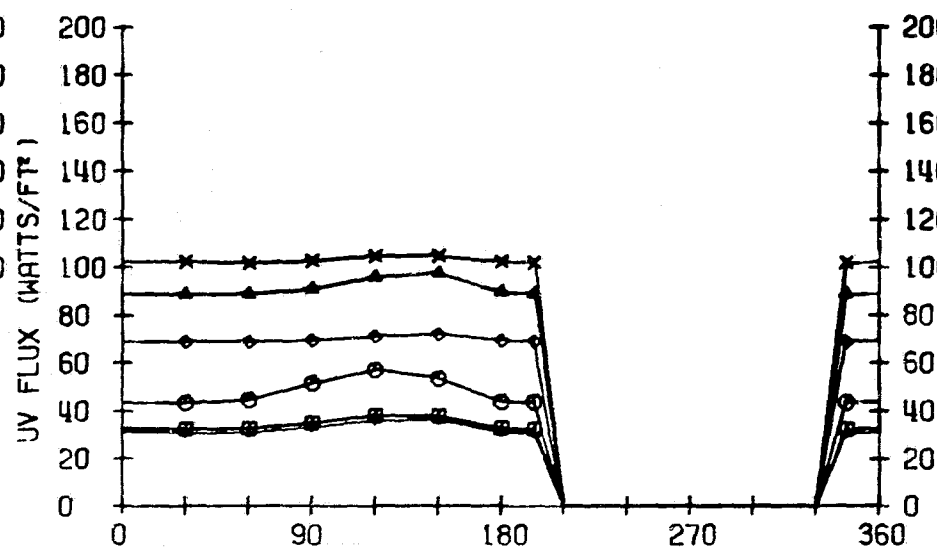
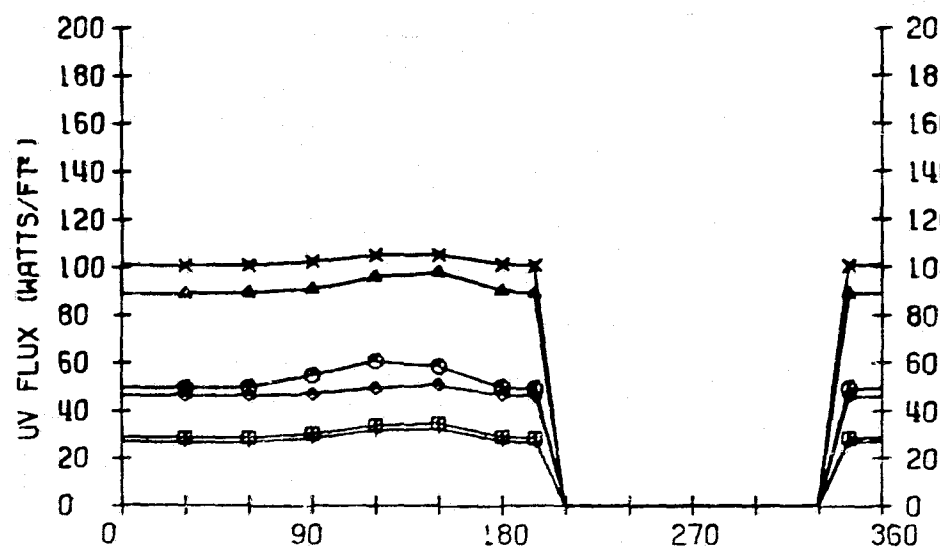
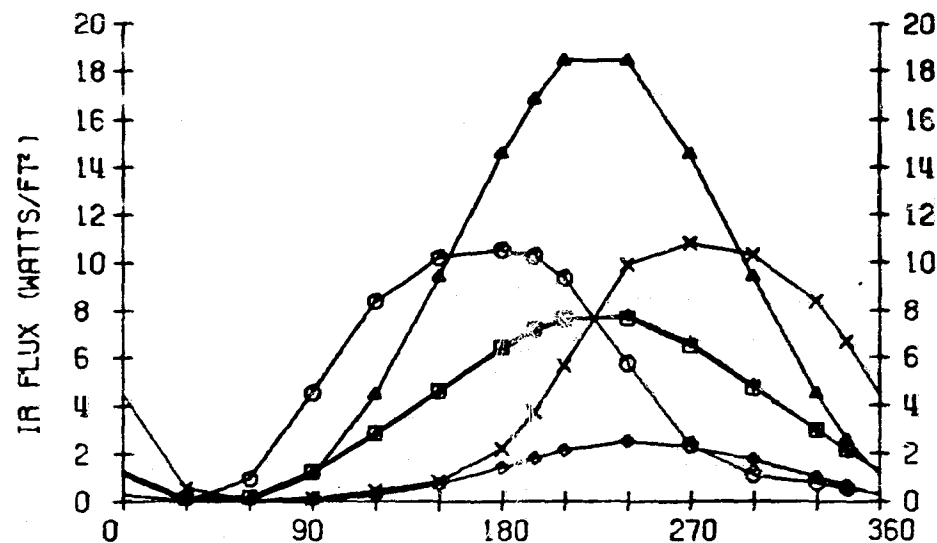
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.5	3.9	4.4	2.6	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.4	5.2	1.9
F	+Z (Δ)	7.8	8.0	8.0	6.7	7.4	5.3
L	-X (+)	3.5	3.9	4.3	2.8	4.5	2.7
U	-Y (x)	3.9	4.5	5.6	2.4	5.2	1.9
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.9
U	+X (□)	17.8	20.2	13.2	21.2	10.1	20.1
V	+Y (○)	31.1	28.2	21.3	35.9	19.2	35.9
F	+Z (Δ)	53.6	53.5	53.5	57.7	54.1	59.3
L	-X (+)	16.9	19.3	14.6	20.1	14.2	21.4
U	-Y (x)	59.8	60.2	57.1	65.1	57.1	65.8
X	-Z (◇)	27.8	40.8	27.6	27.1	26.6	28.1

250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1



LOCATION 2

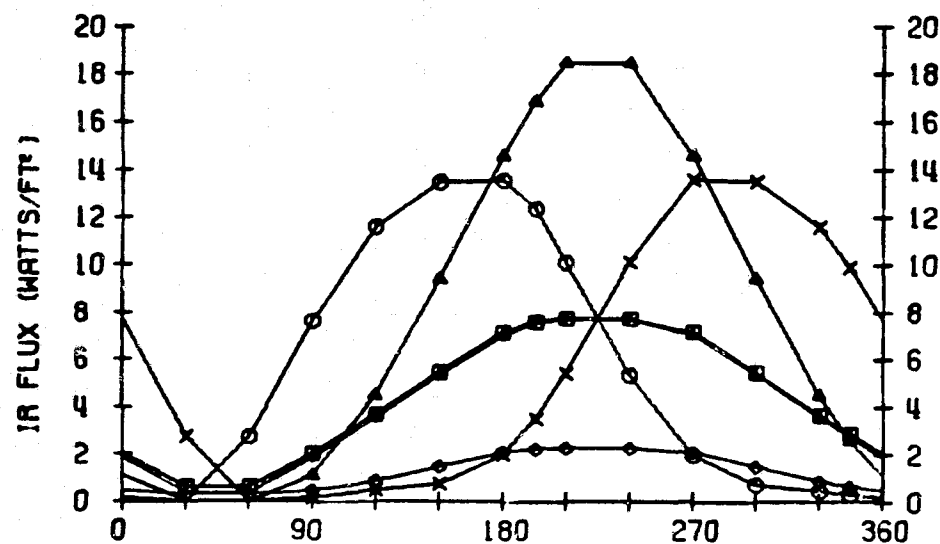


ORBIT POSITION (DEG)

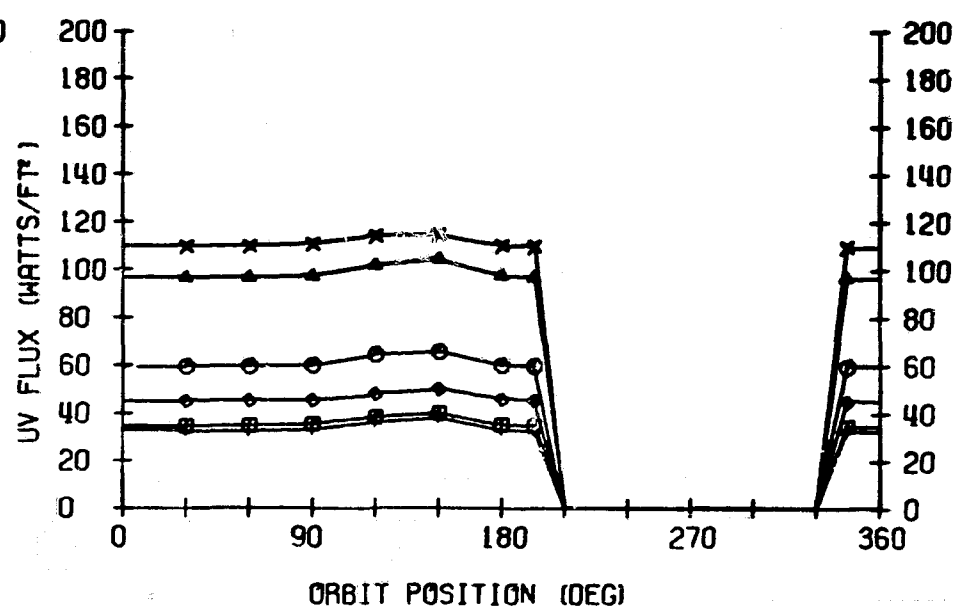
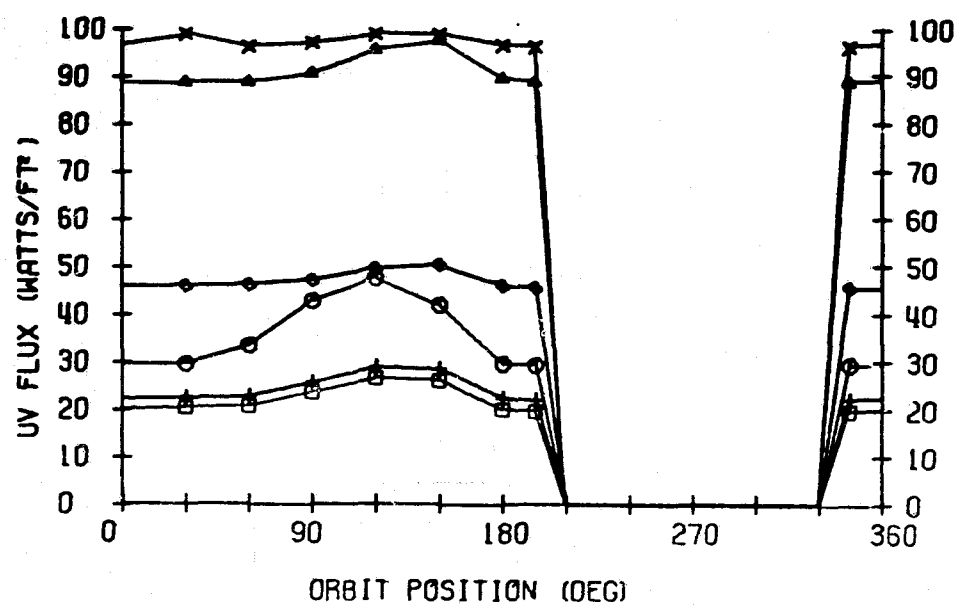
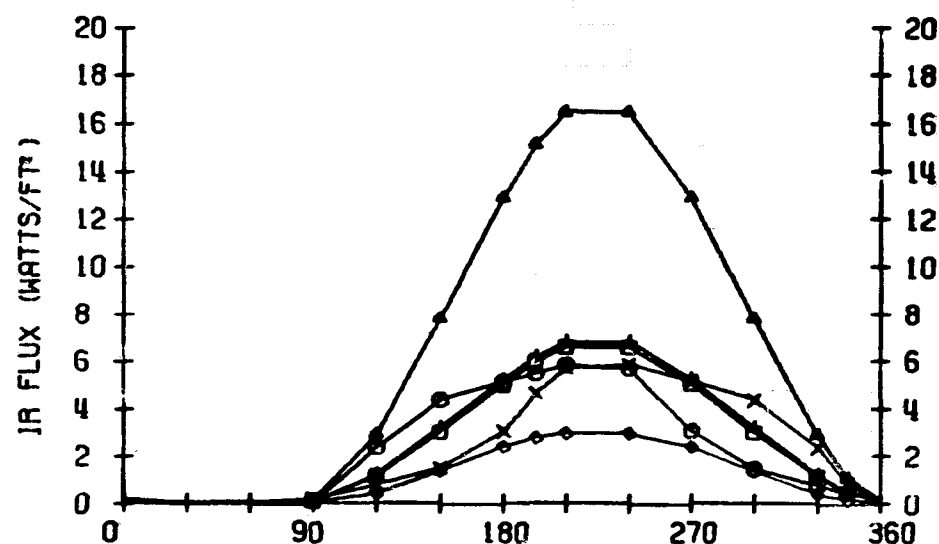
ORBIT POSITION (DEG)

250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3

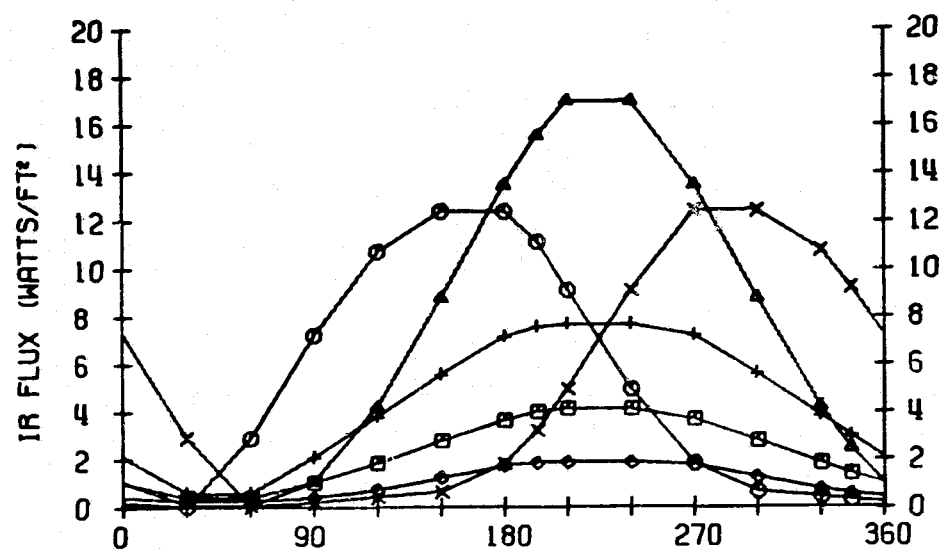


LOCATION 4

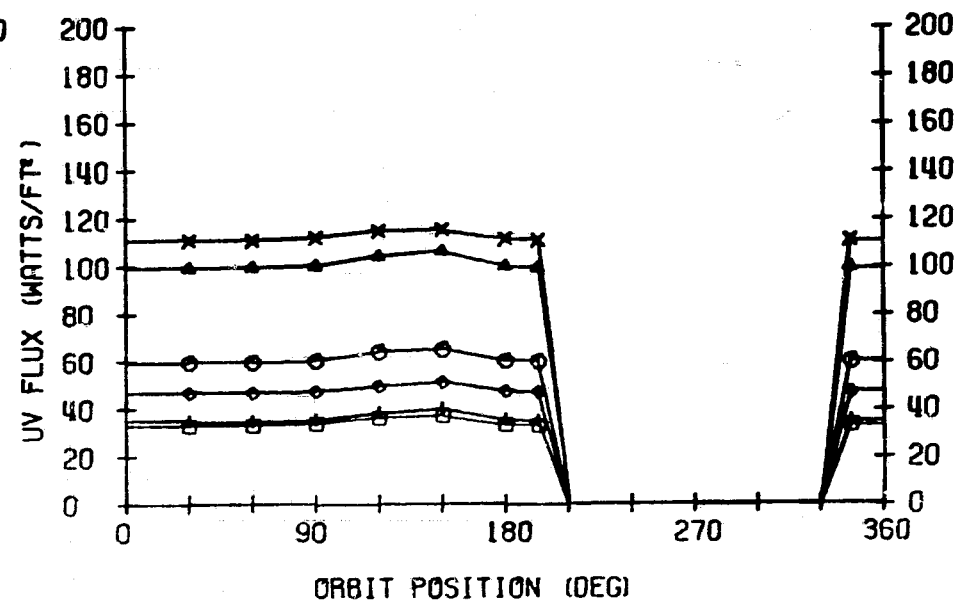
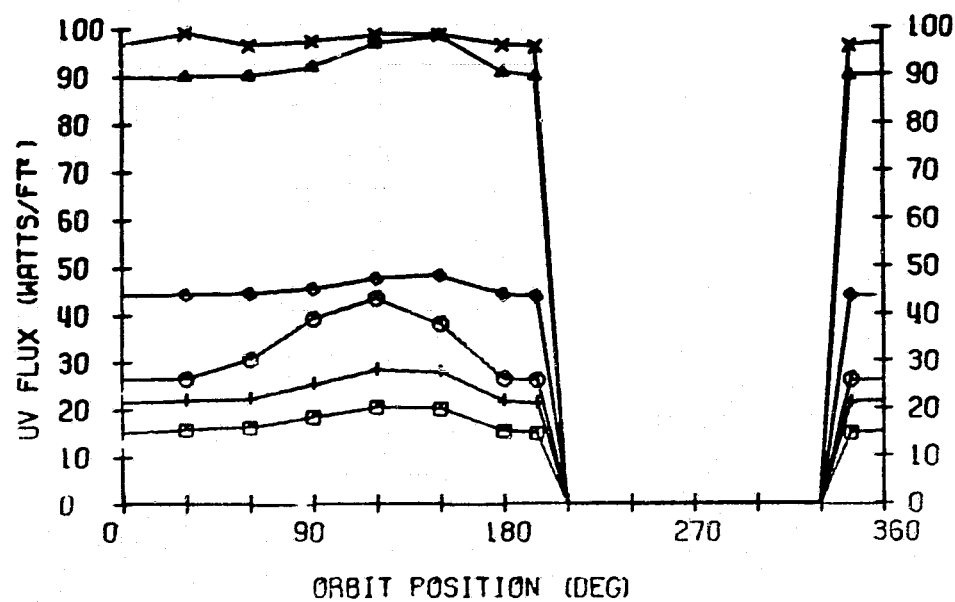
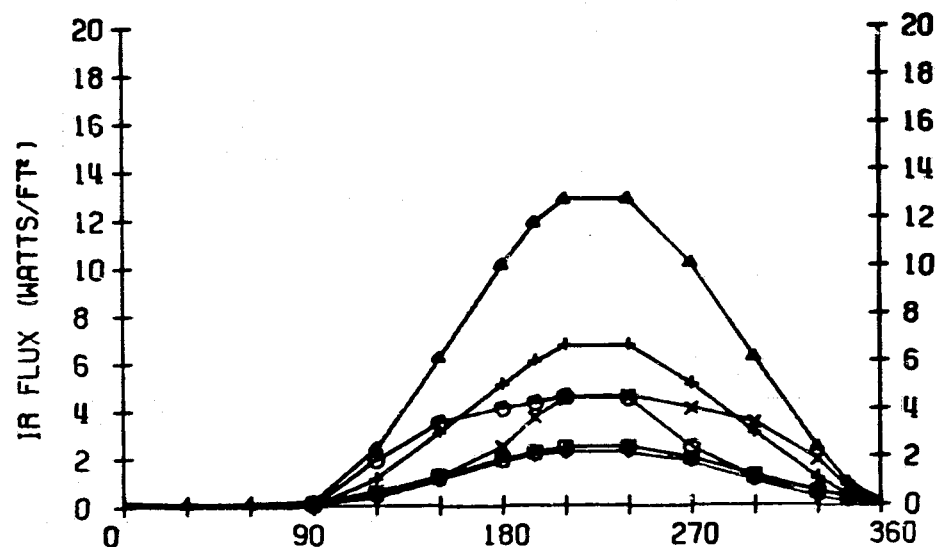


250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

	SURFACE DIRECTION	LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
I	+X (□)	19.8	19.7	14.1	24.3	20.8	29.4
R	+Y (○)	25.5	21.8	13.9	32.1	15.9	34.8
F	+Z (△)	0.4	0.3	0.2	5.8	2.4	10.9
L	-X (+)	20.2	19.9	15.6	23.8	13.9	24.9
U	-Y (X)	16.7	14.2	9.7	22.9	11.6	25.6
X	-Z (◇)	31.5	38.9	31.3	31.5	32.7	35.0

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

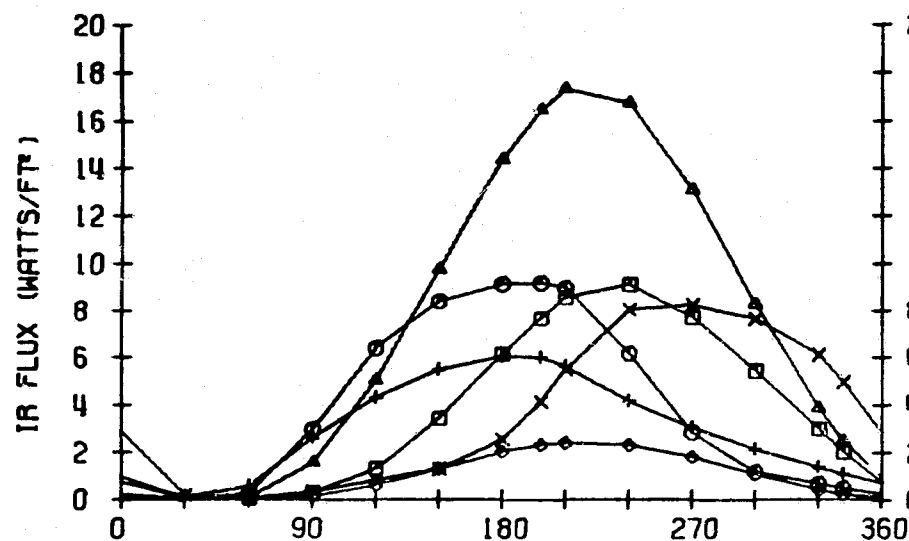
FOR

250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

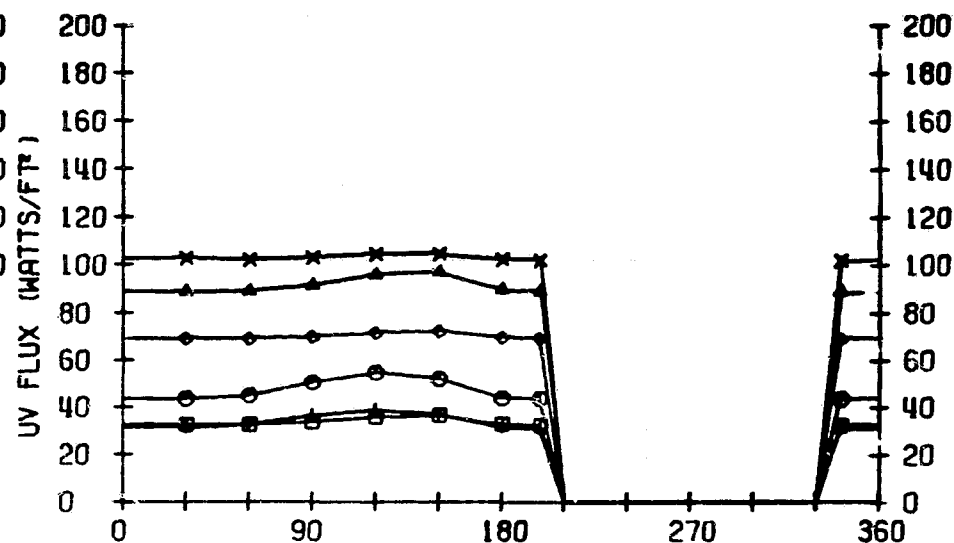
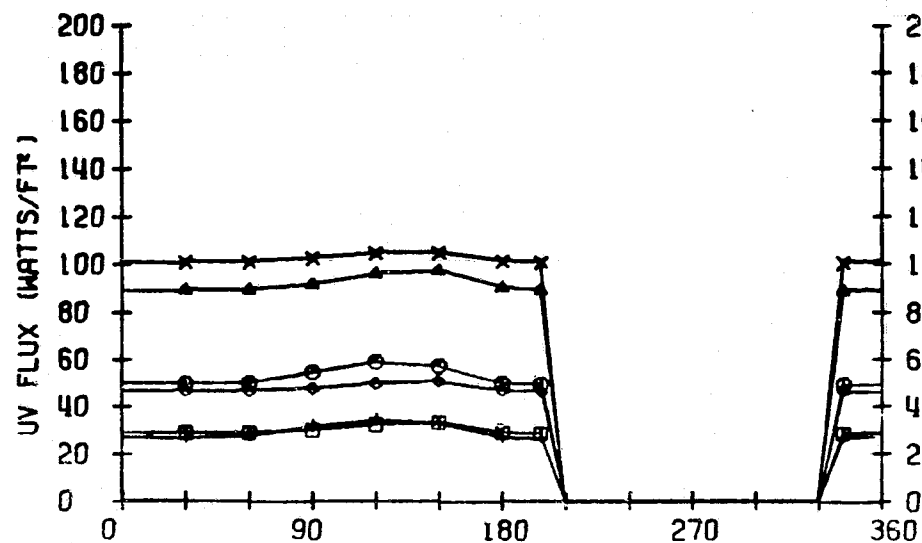
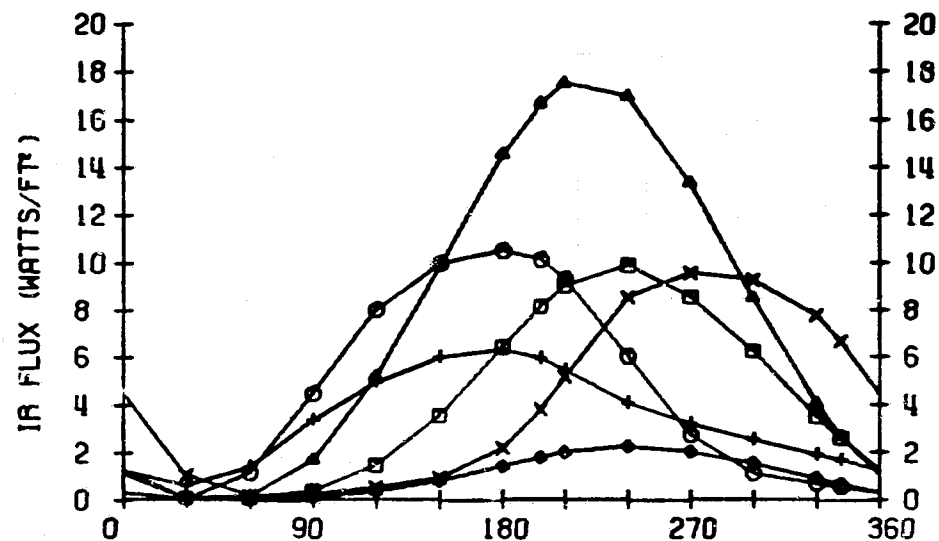
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.8	4.2	4.8	2.8	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.4	5.2	1.8
F	+Z (Δ)	7.6	7.7	7.7	6.4	7.0	4.9
L	-X (+)	3.0	3.4	4.0	2.4	4.2	2.3
U	-Y (x)	3.6	4.1	5.3	2.2	4.8	1.7
X	-Z (◇)	1.0	1.0	1.2	1.1	1.0	0.8
U	+X (□)	18.0	20.3	12.9	21.7	10.7	20.9
V	+Y (○)	31.7	28.5	21.1	36.9	19.4	37.1
F	+Z (Δ)	55.0	54.9	54.9	59.3	55.7	61.3
L	-X (+)	17.9	20.5	15.9	21.0	15.5	22.5
U	-Y (x)	61.3	61.9	58.7	66.8	58.9	67.8
X	-Z (◇)	28.6	42.0	28.3	27.8	27.5	29.1

250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG. ROLL ABOUT X-AXIS

LOCATION 1



LOCATION 2

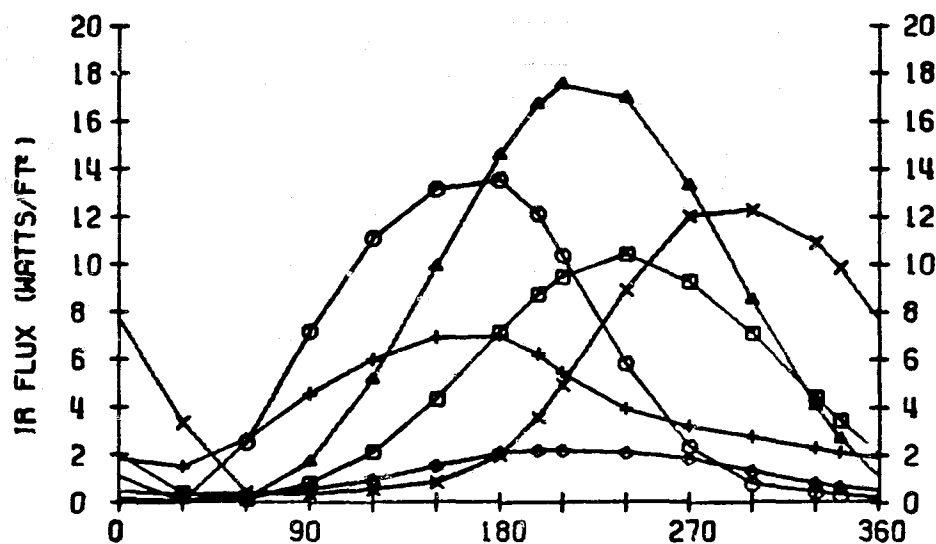


ORBIT POSITION (DEG)

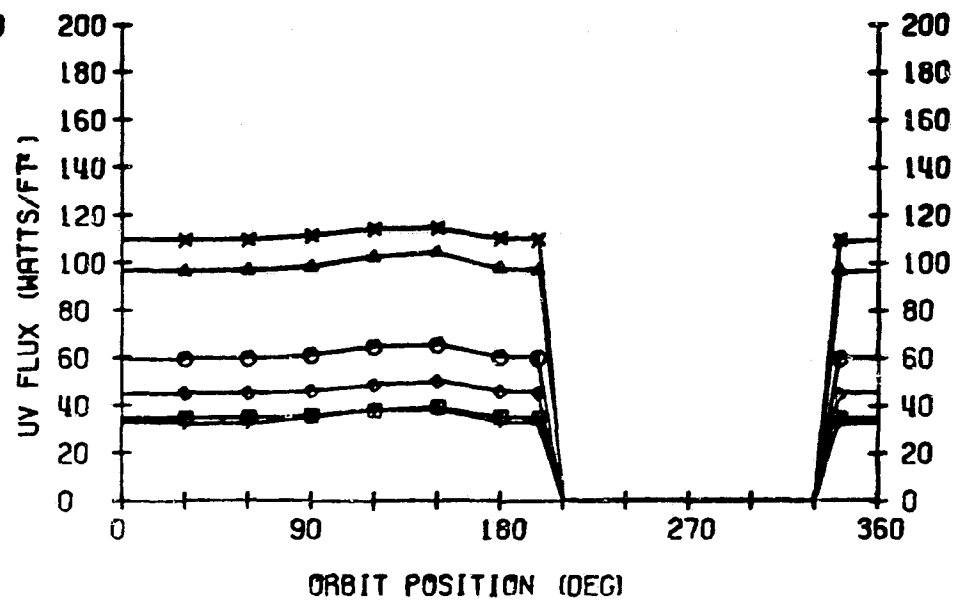
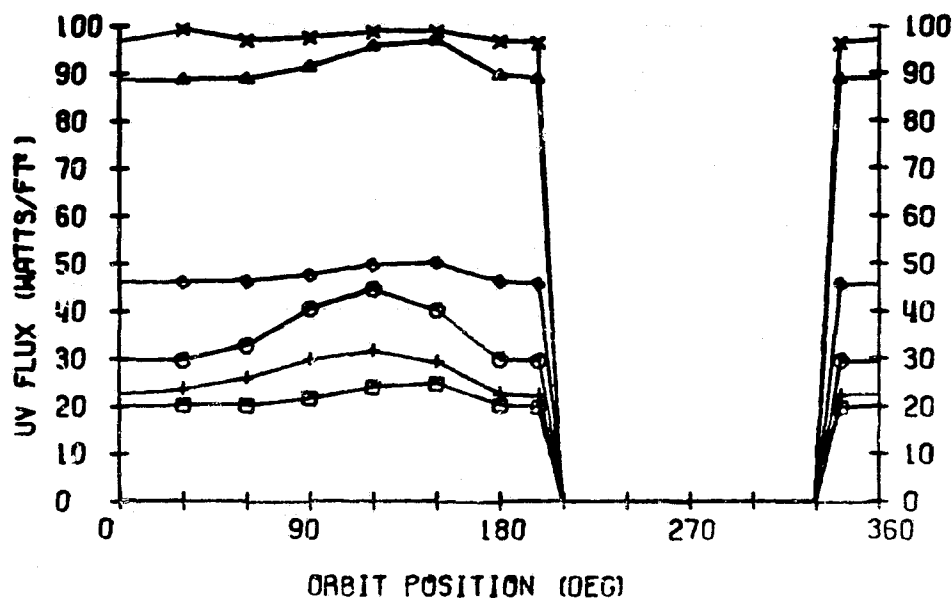
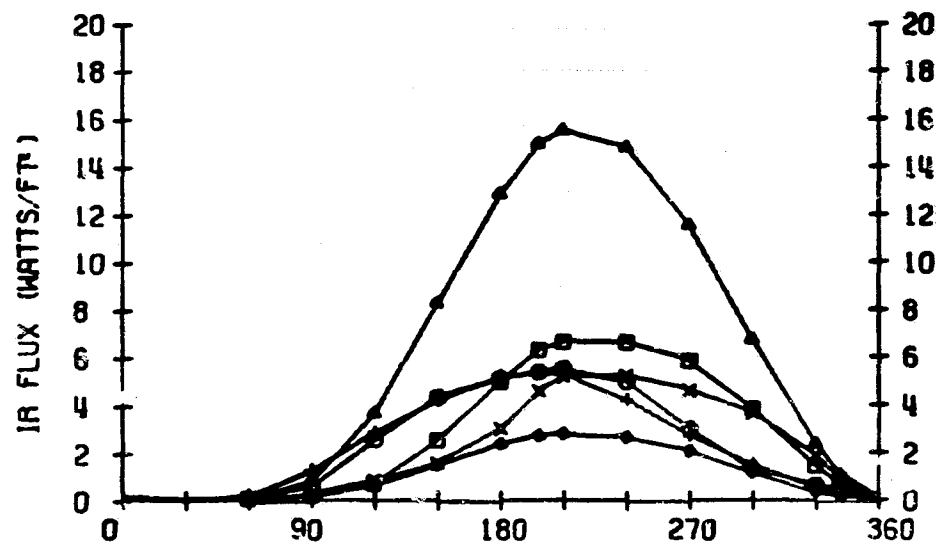
ORBIT POSITION (DEG)

250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3

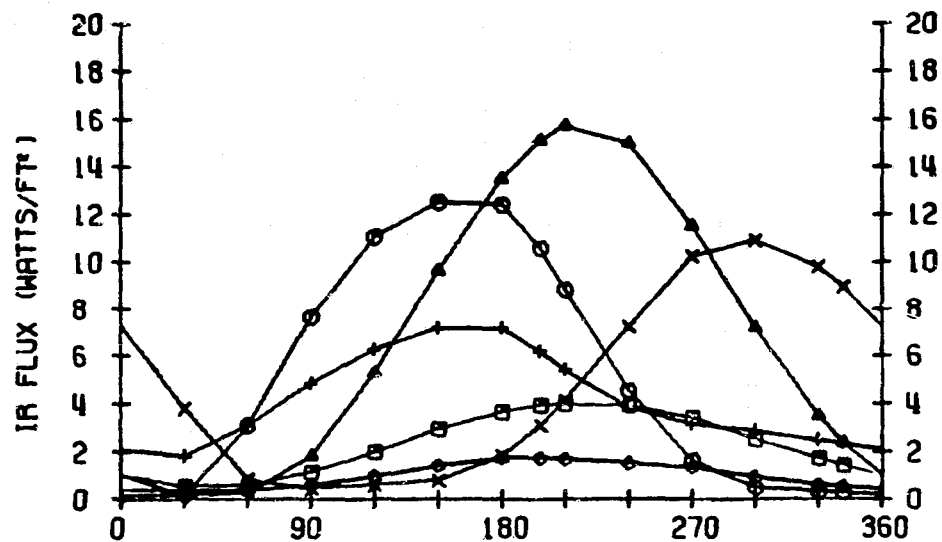


LOCATION 4

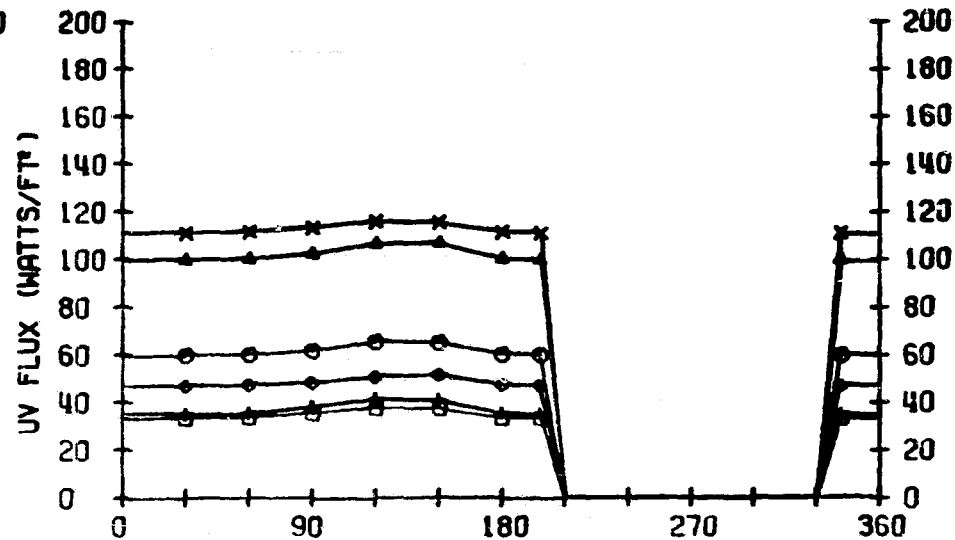
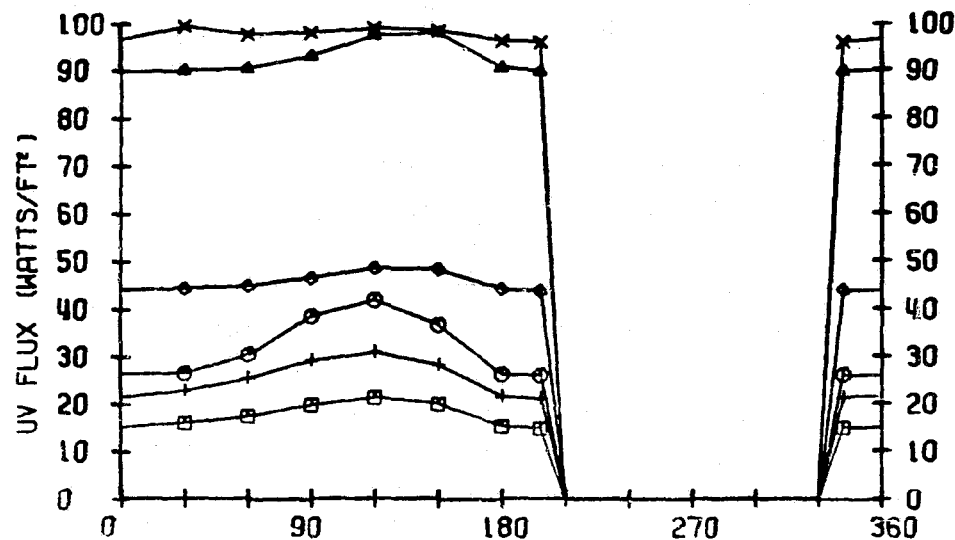
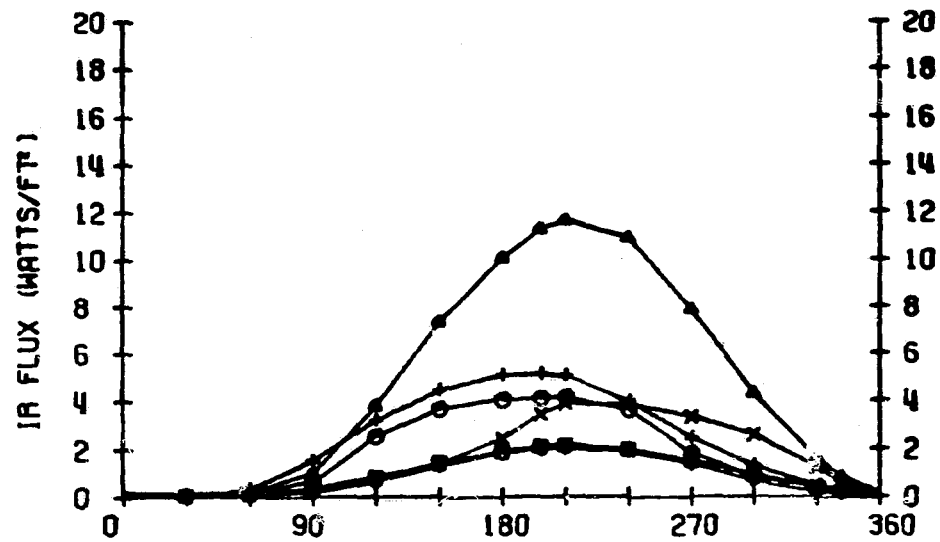


250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	19.9	19.8	14.1	24.3	21.0	29.6
K	+Y (○)	25.6	21.8	13.9	32.2	15.9	34.9
F	+Z (△)	0.4	0.3	0.2	5.8	2.4	10.9
L	-X (+)	20.3	19.9	15.6	23.9	13.9	25.0
U	-Y (X)	16.7	14.2	9.7	23.0	11.6	25.8
X	-Z (◇)	31.6	39.0	31.4	31.6	32.9	35.1

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

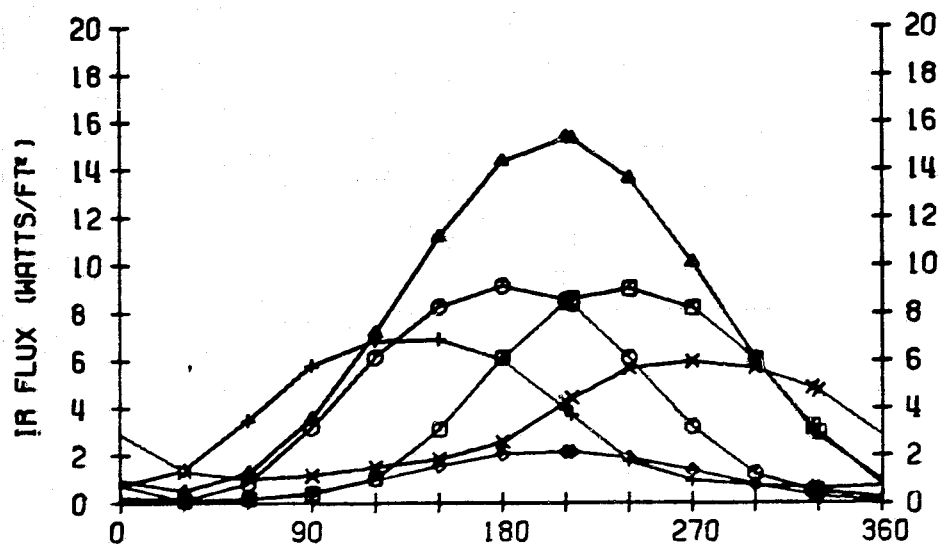
FOR

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

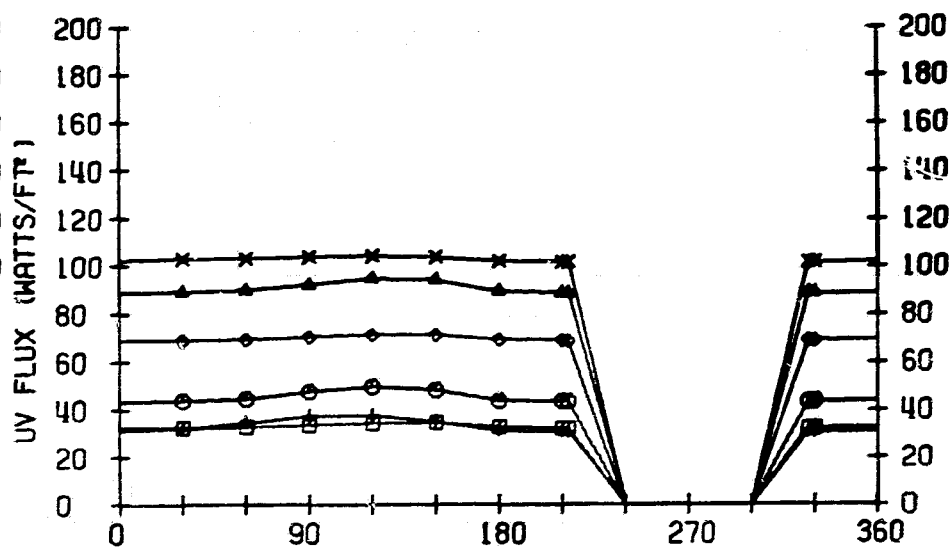
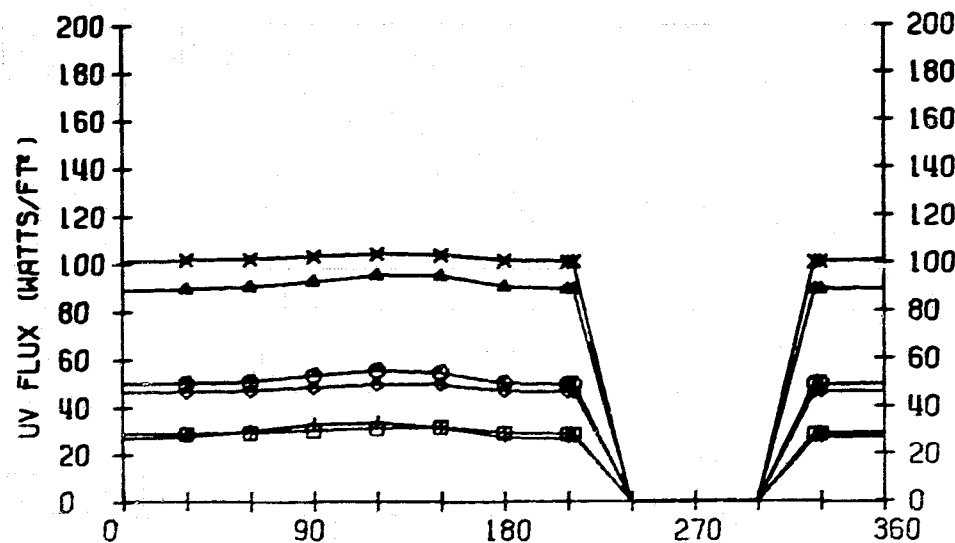
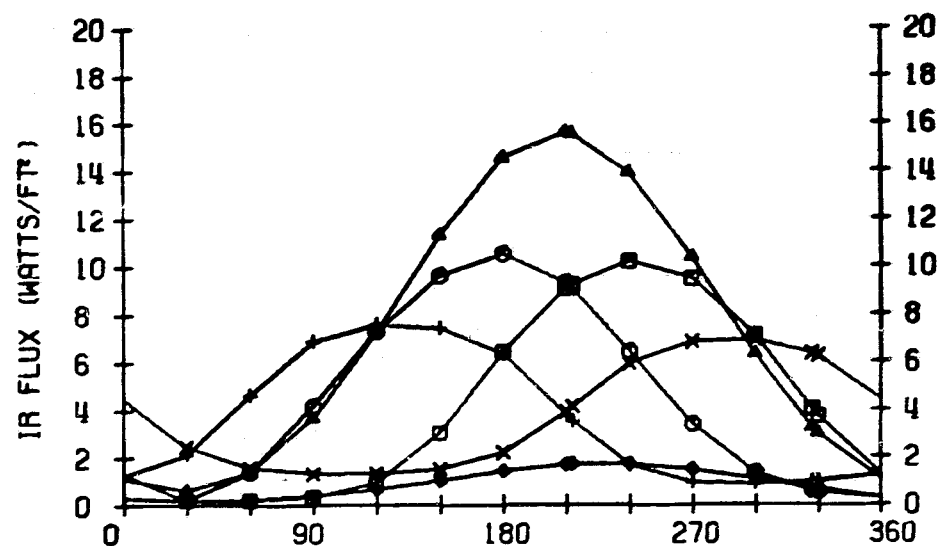
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.9	4.3	4.9	2.7	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.3	5.2	1.8
F	+Z (Δ)	7.2	7.4	7.4	5.1	6.7	4.6
L	-X (+)	3.3	3.7	4.4	2.5	4.6	2.5
U	-Y (x)	3.2	3.7	4.9	2.0	4.4	1.4
X	-Z (◇)	1.0	0.9	1.1	1.1	0.9	0.8
U	+X (□)	20.1	22.7	14.1	24.4	11.6	23.6
V	+Y (○)	35.1	31.0	21.9	41.6	19.9	41.9
F	+Z (Δ)	62.1	61.9	61.9	67.1	62.9	69.3
L	-X (+)	20.2	23.1	17.7	23.8	17.2	25.6
U	-Y (x)	69.5	70.2	66.6	75.6	66.8	76.7
X	-Z (◇)	32.3	47.6	31.9	31.5	31.0	32.9

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1



LOCATION 2

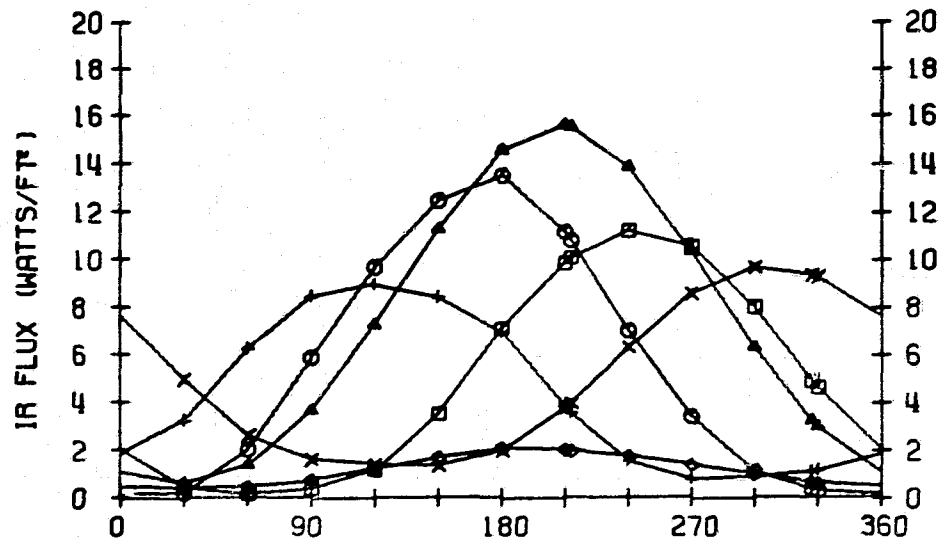


ORBIT POSITION (DEG)

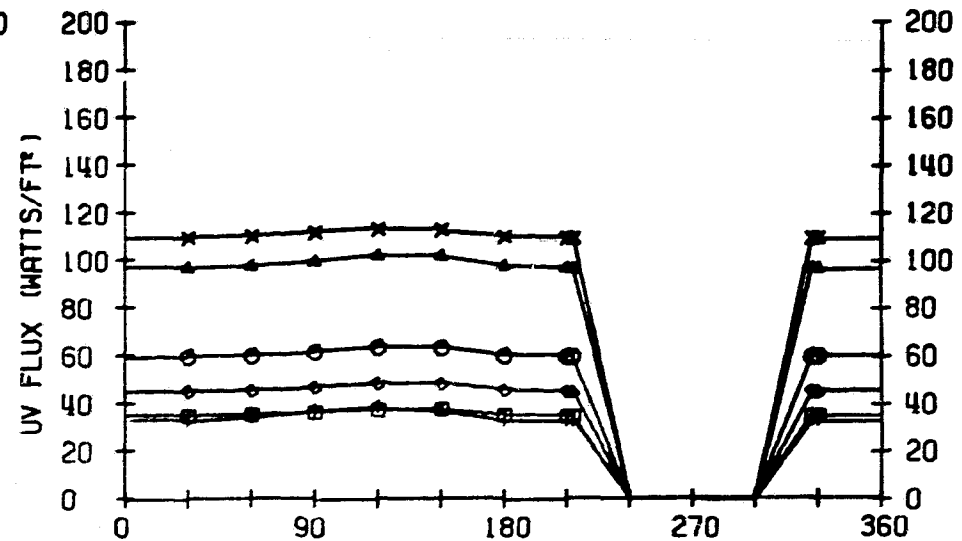
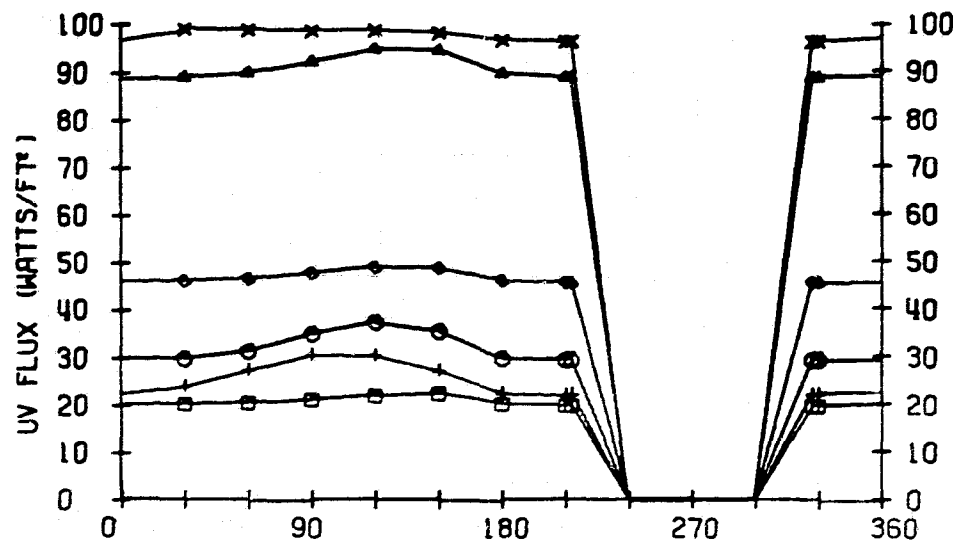
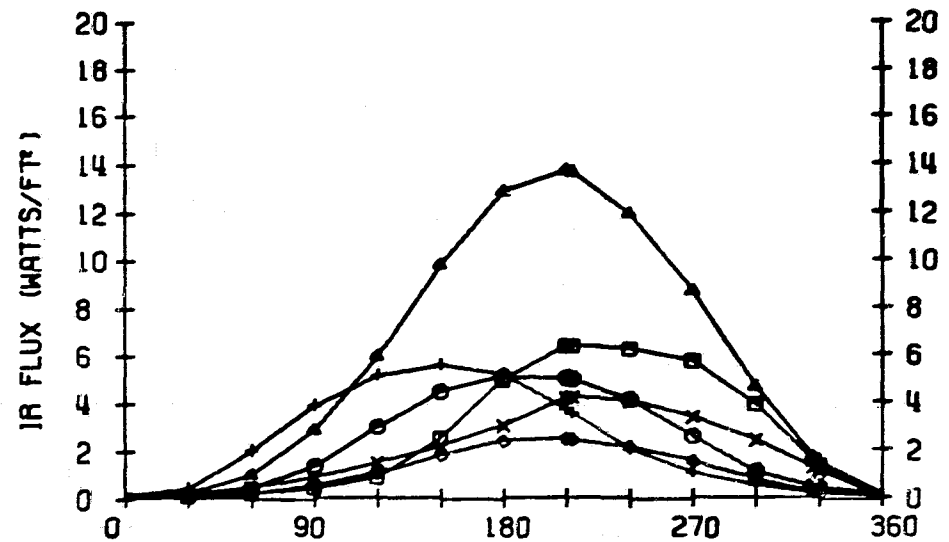
ORBIT POSITION (DEG)

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3



LOCATION 4

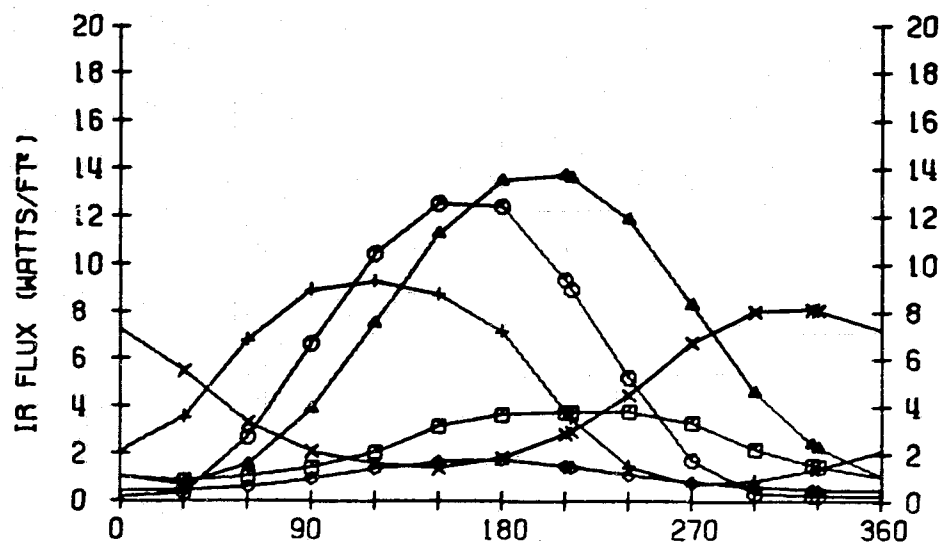


ORBIT POSITION (DEG)

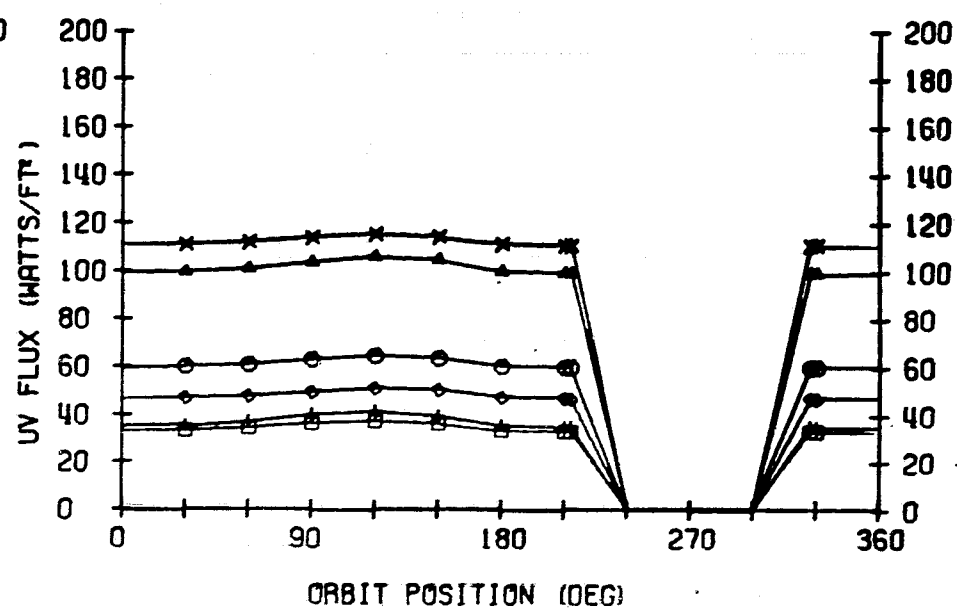
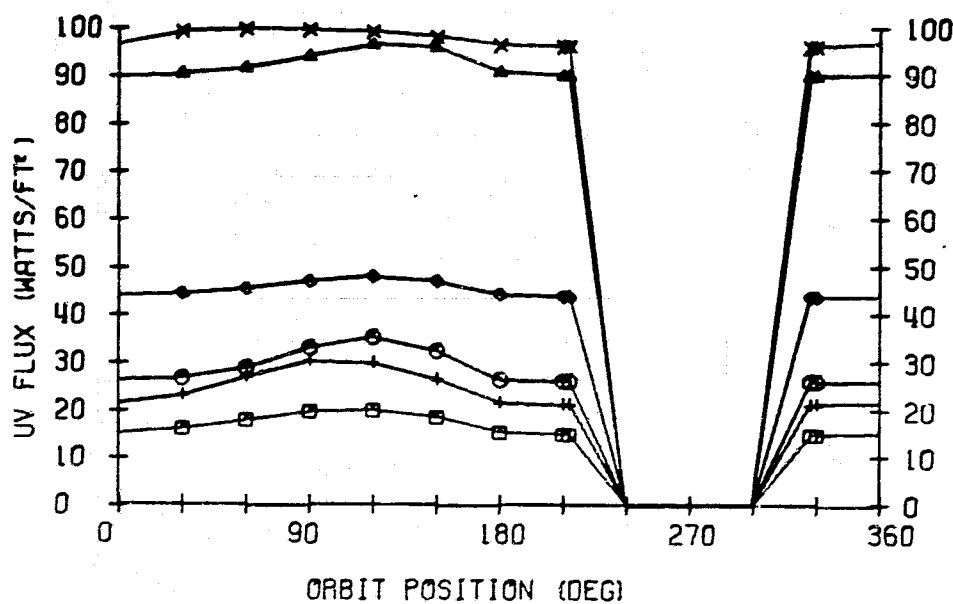
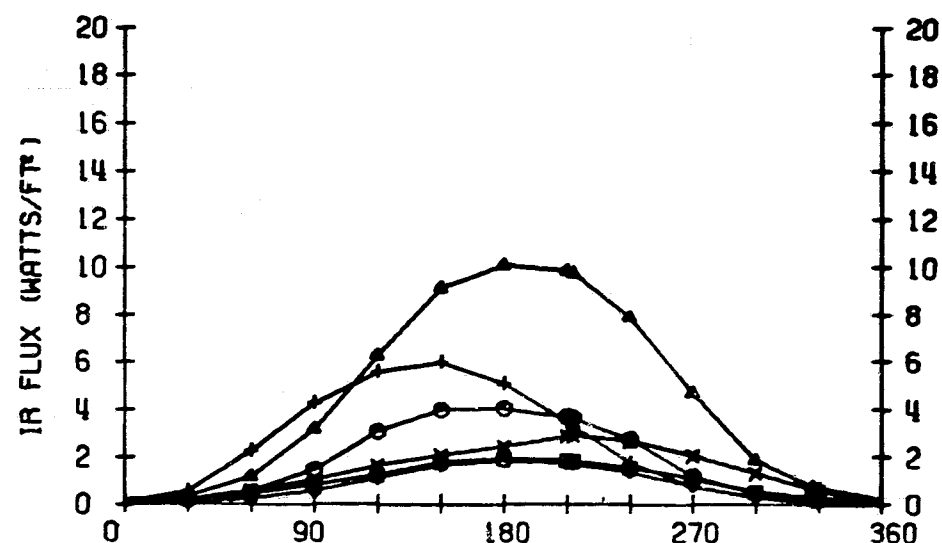
ORBIT POSITION (DEG)

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	22.7	22.6	16.1	27.7	23.9	33.9
R	+Y (●)	29.4	25.1	16.0	36.9	18.4	40.2
F	+Z (△)	0.5	0.3	0.2	6.6	2.8	12.5
L	-X (+)	23.1	22.8	17.8	27.3	15.9	28.6
U	-Y (X)	18.9	16.1	10.9	26.0	13.2	29.4
X	-Z (◇)	36.0	44.7	35.8	35.9	37.7	40.3

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

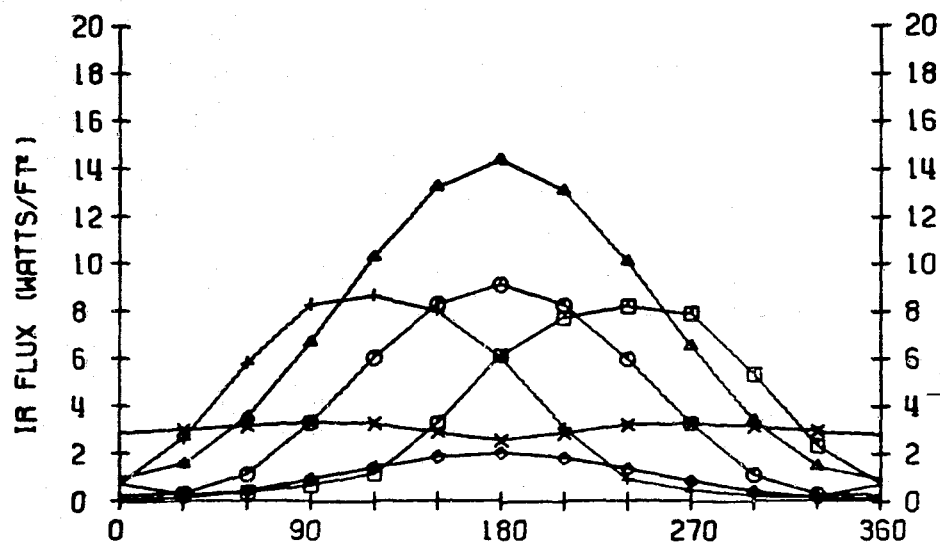
FOR

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

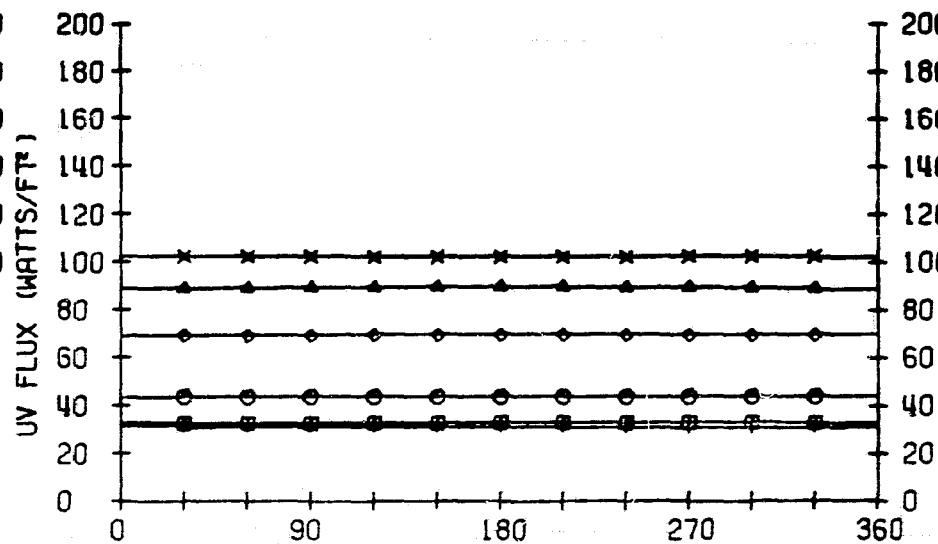
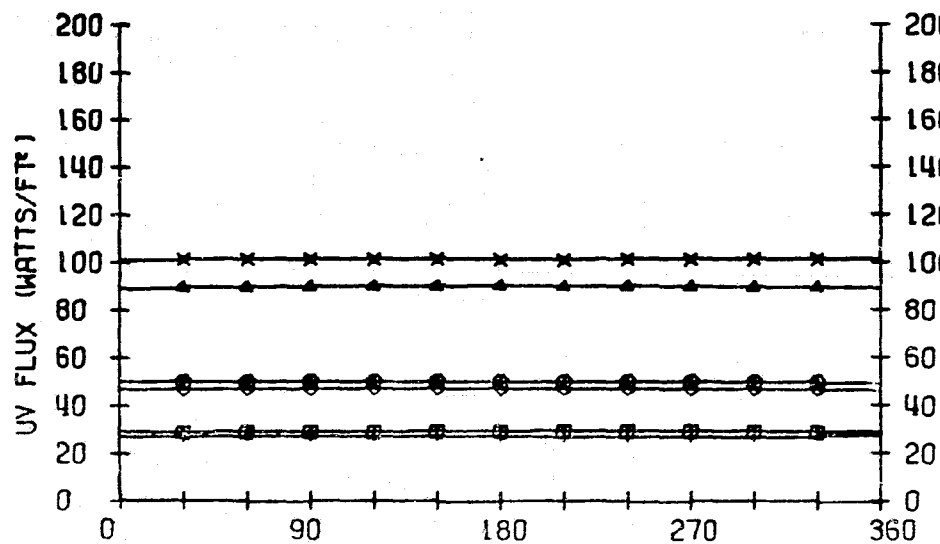
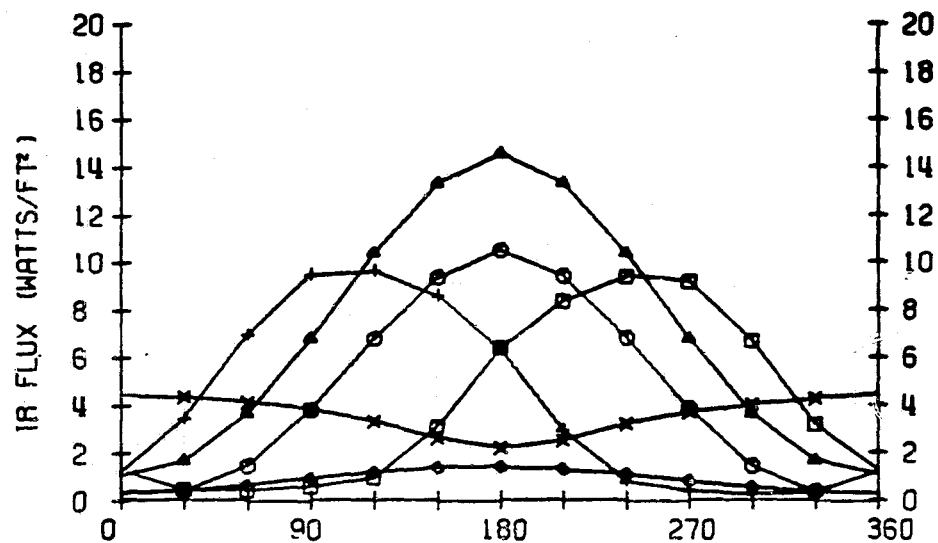
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.7	4.2	4.8	2.6	2.2	1.0
R	+Y (○)	3.9	4.5	5.6	2.3	5.1	1.8
F	+Z (Δ)	7.1	7.3	7.3	6.0	6.5	4.6
L	-X (+)	3.8	4.2	4.9	2.9	5.1	2.9
U	-Y (X)	3.0	3.5	4.8	1.9	4.3	1.4
X	-Z (◇)	0.9	0.9	1.1	1.1	1.0	0.8
U	+X (□)	28.7	32.6	20.1	35.0	15.1	33.2
V	+Y (○)	49.7	43.6	29.6	59.9	26.3	60.0
F	+Z (Δ)	89.4	89.1	89.1	96.9	90.2	99.7
L	-X (+)	27.3	31.3	22.6	33.1	21.7	35.3
U	-Y (X)	100.9	102.1	96.6	109.8	96.4	111.1
X	-Z (◇)	46.4	69.1	45.8	45.2	44.0	47.0

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1



LOCATION 2

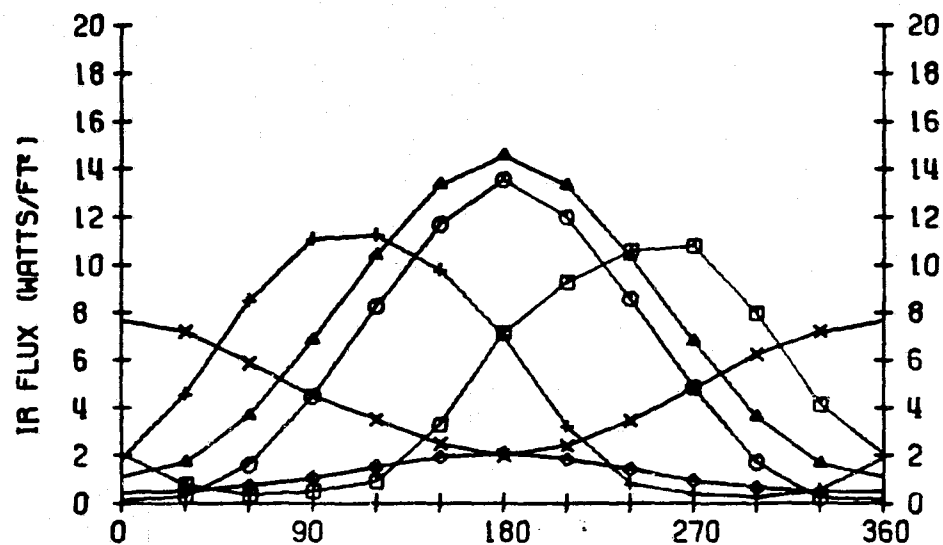


ORBIT POSITION (DEG)

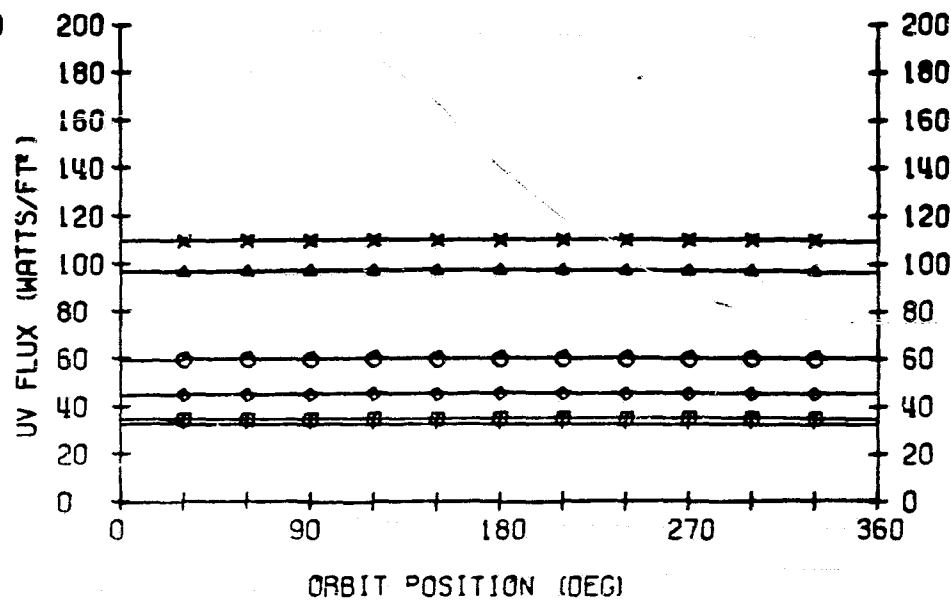
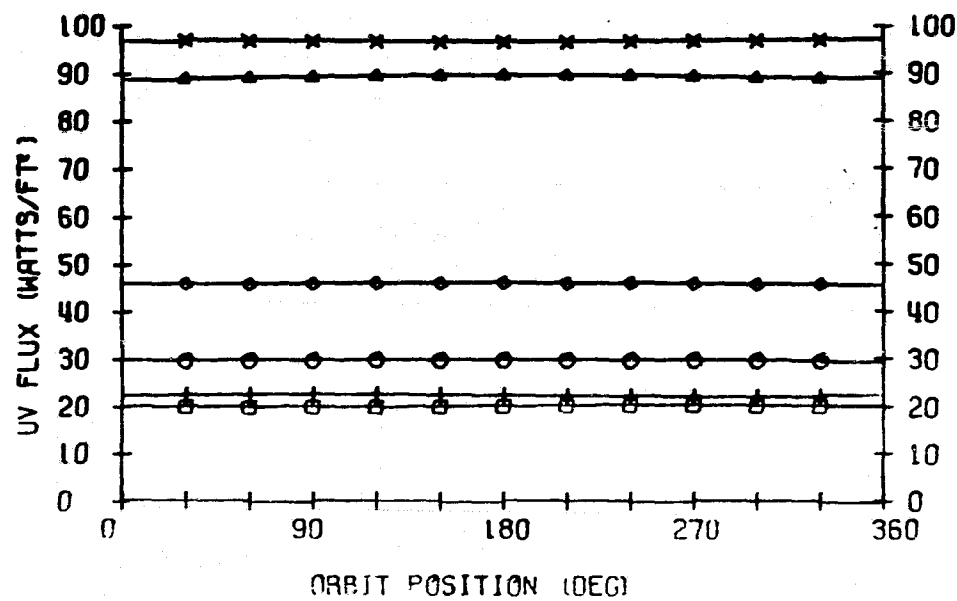
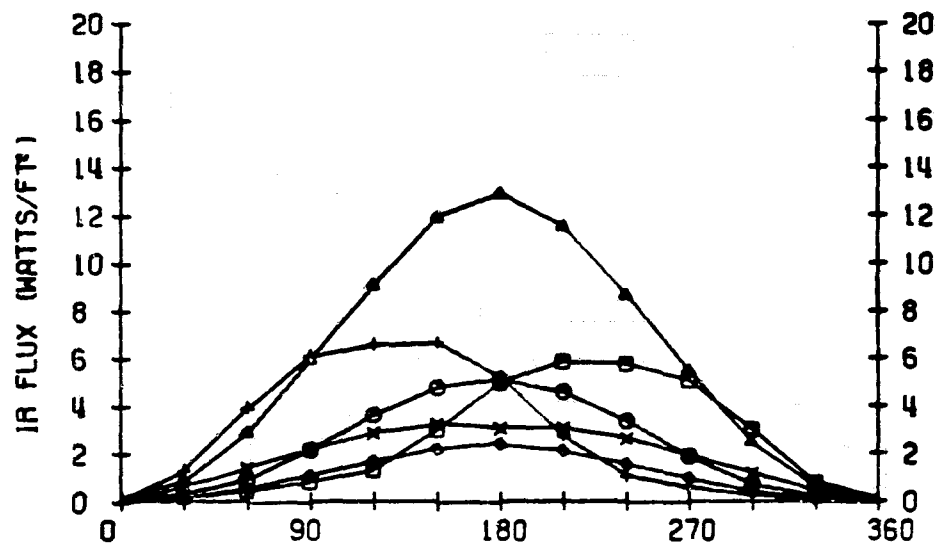
ORBIT POSITION (DEG)

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3

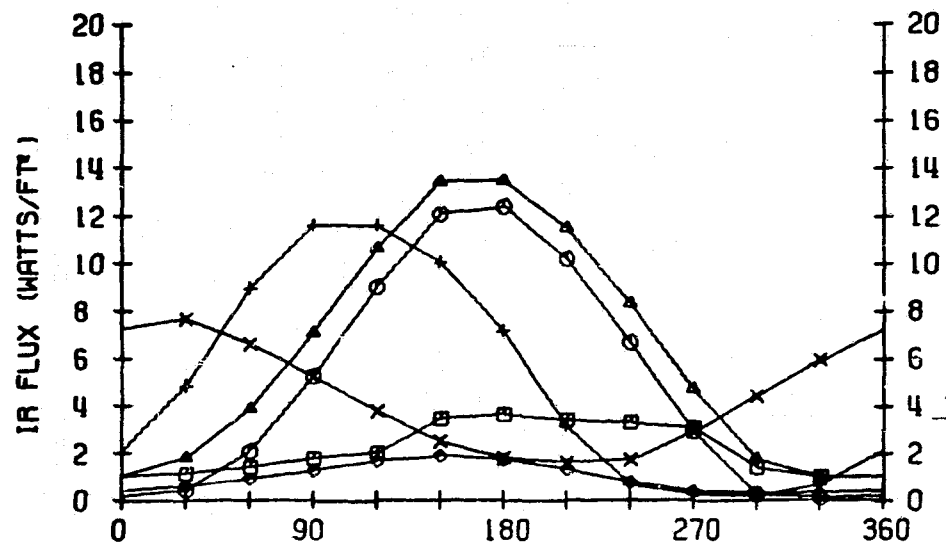


LOCATION 4

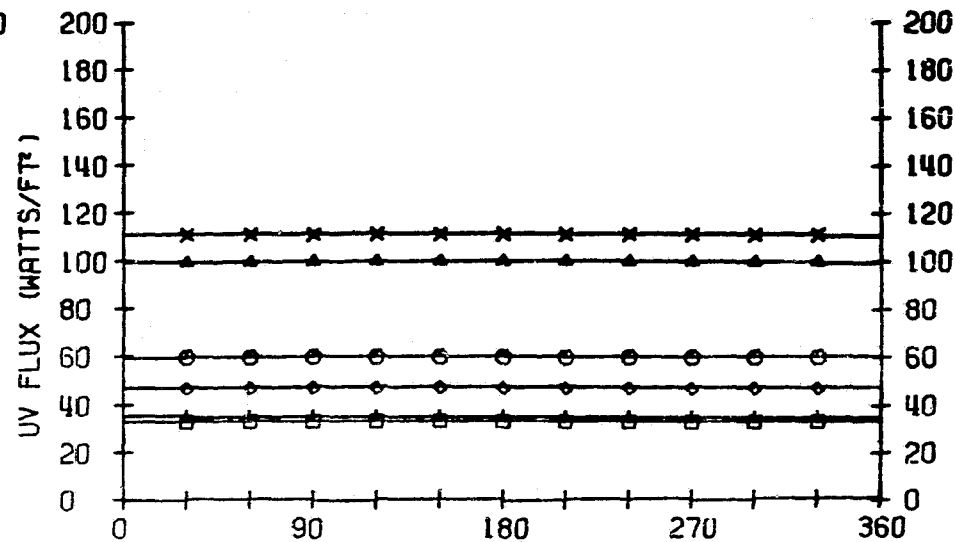
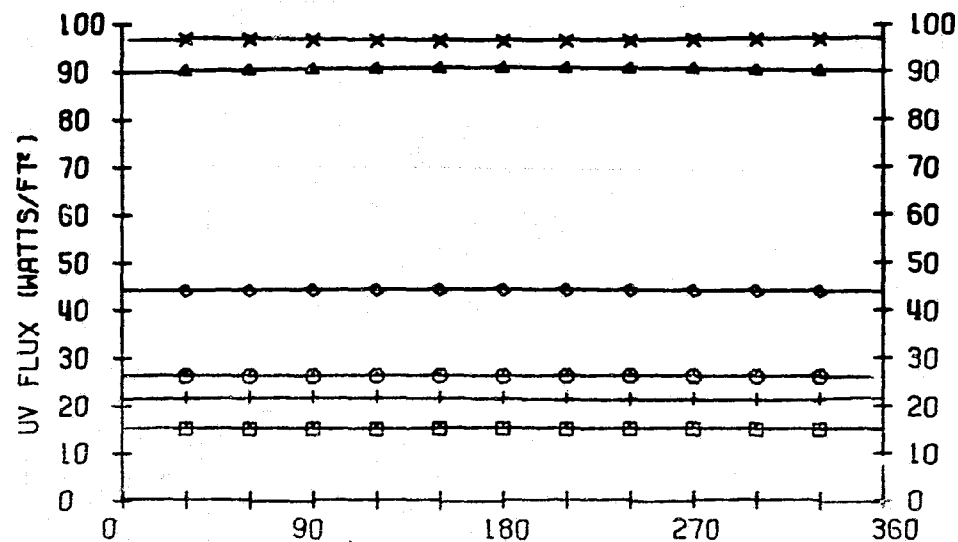
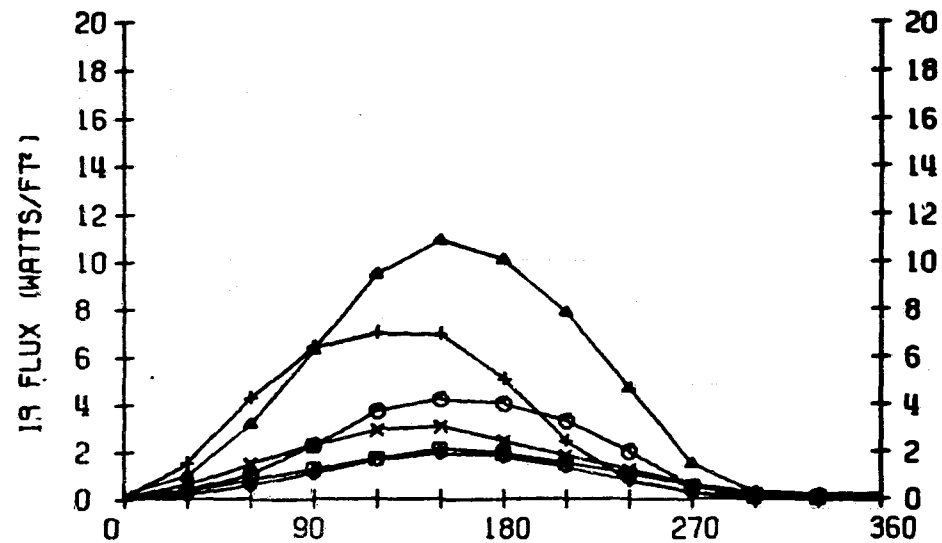


250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	28.2	28.3	20.0	34.4	29.2	41.7
R	+Y (○)	37.1	31.7	20.2	46.5	23.0	50.5
F	+Z (△)	0.6	0.4	0.2	8.2	3.4	15.3
L	-X (+)	28.8	28.6	22.1	33.9	19.8	35.6
U	-Y (X)	23.0	19.9	13.3	31.9	16.1	36.0
X	-Z (◇)	44.8	56.2	44.6	44.6	46.7	50.0

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

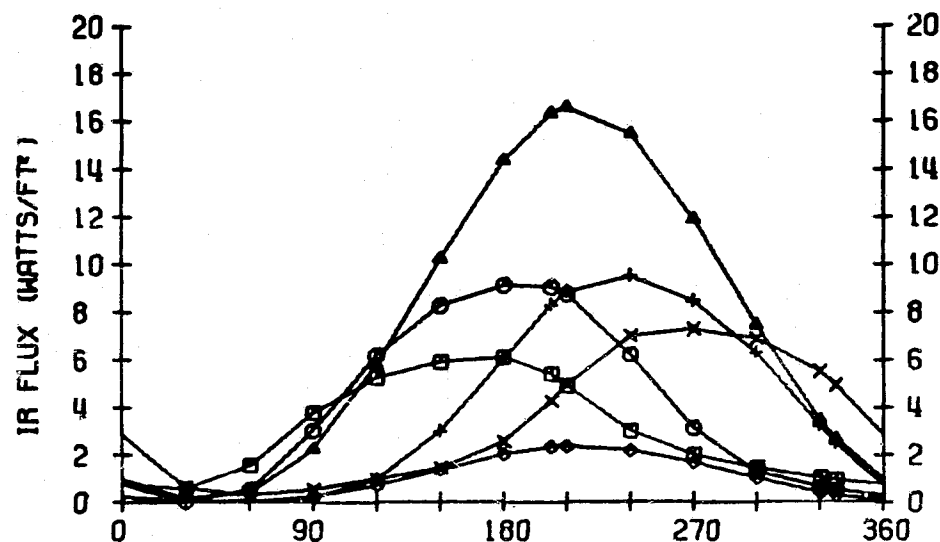
FOR

250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

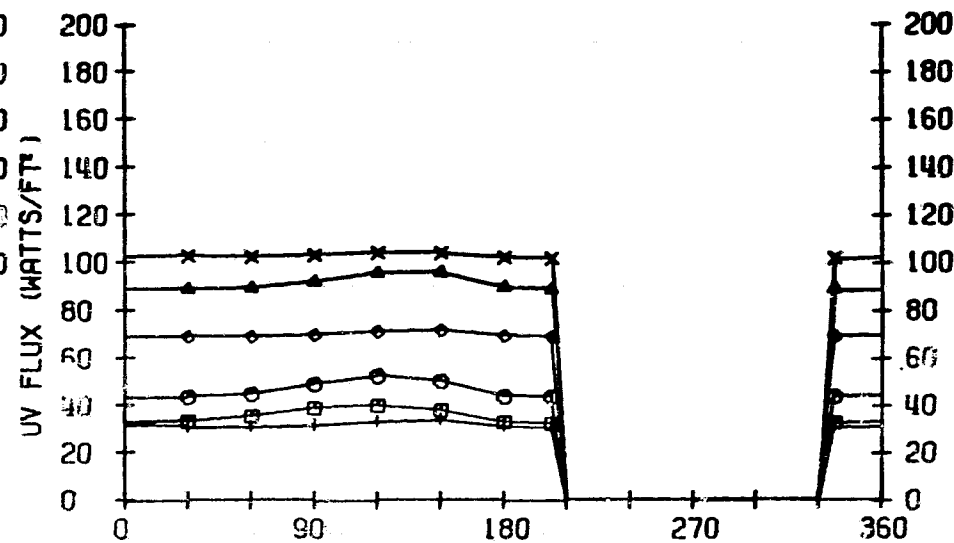
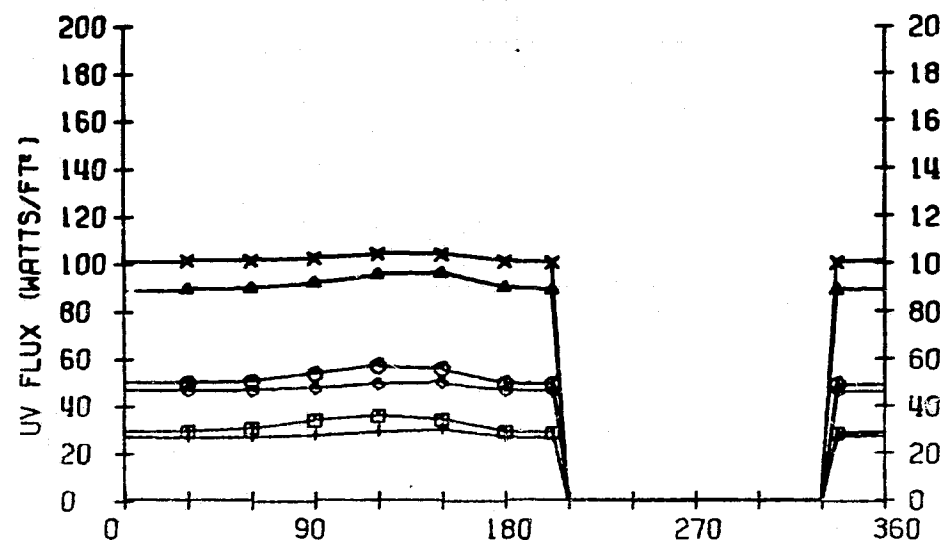
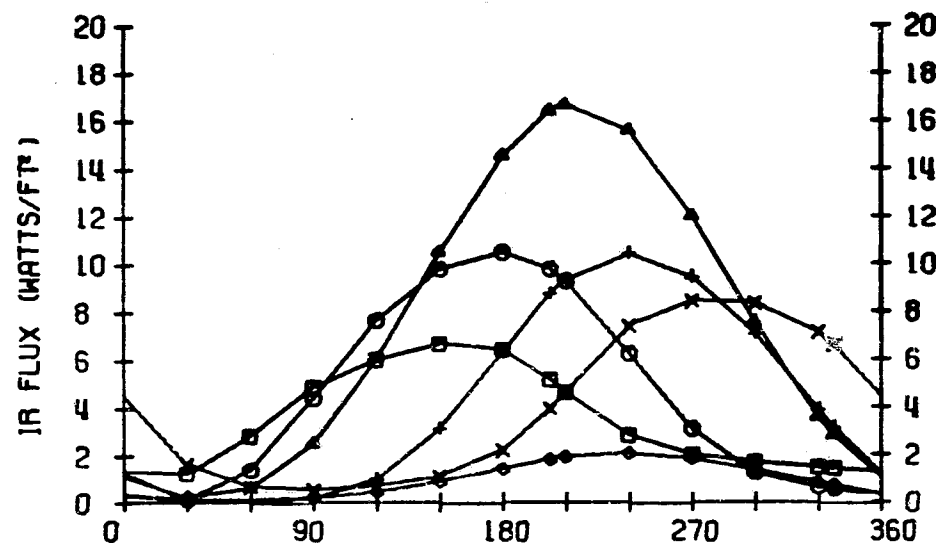
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.0	3.5	4.1	2.2	2.2	1.1
R	+Y (○)	3.9	4.5	5.7	2.4	5.1	1.9
F	+Z (Δ)	7.4	7.6	7.6	6.3	7.1	5.3
L	-X (+)	4.0	4.4	5.0	3.1	5.2	3.1
U	-Y (×)	3.4	3.9	5.1	2.1	4.9	1.9
X	-Z (◇)	1.0	0.9	1.2	1.1	1.0	0.9
U	+X (□)	19.5	22.2	14.8	22.9	10.1	21.0
V	+Y (○)	32.5	29.1	21.0	38.2	18.5	37.9
F	+Z (Δ)	57.1	57.0	56.9	61.5	57.3	62.8
L	-X (+)	17.5	20.0	14.7	21.2	14.0	22.4
U	-Y (×)	63.7	64.3	61.1	69.3	60.6	69.8
X	-Z (◇)	29.6	43.6	29.3	28.9	27.9	29.7

250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1



LOCATION 2

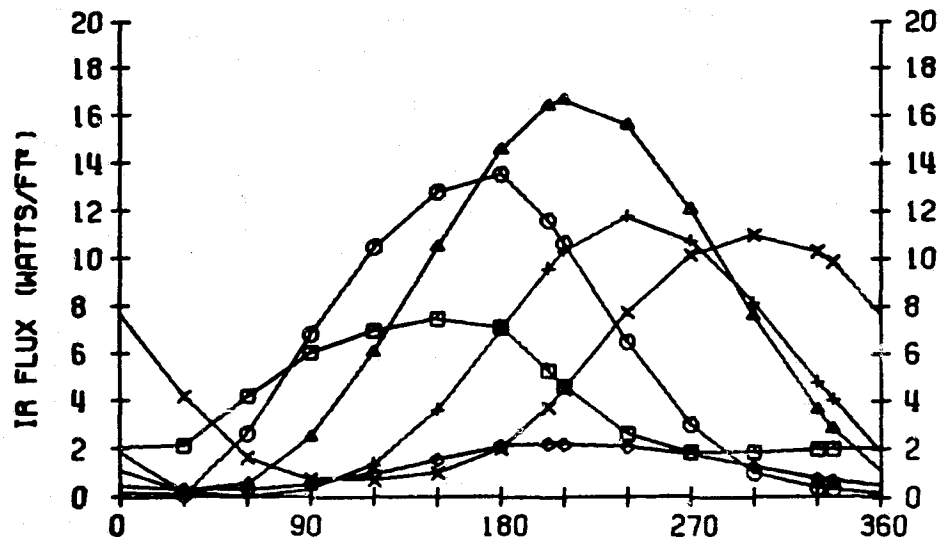


ORBIT POSITION (DEG)

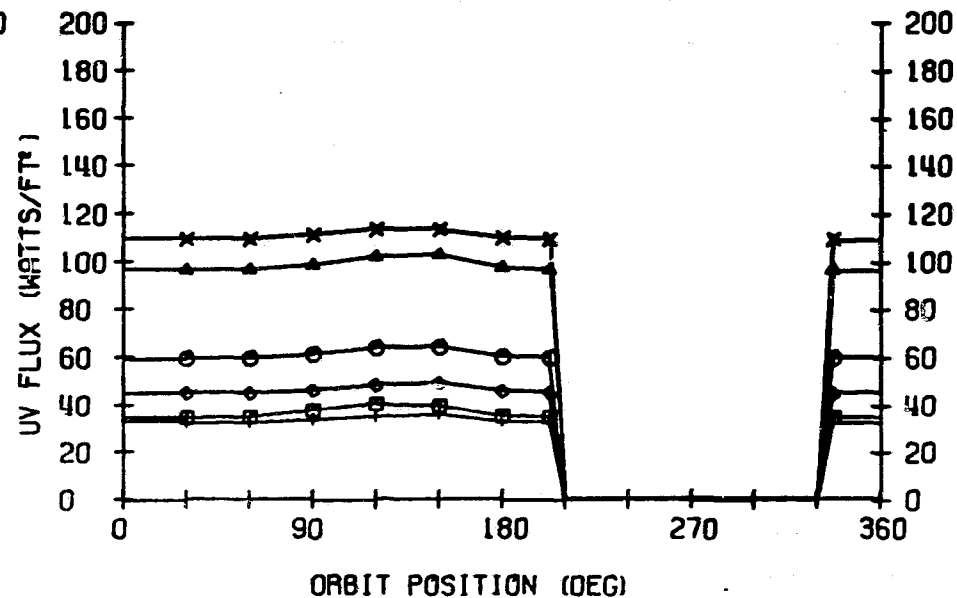
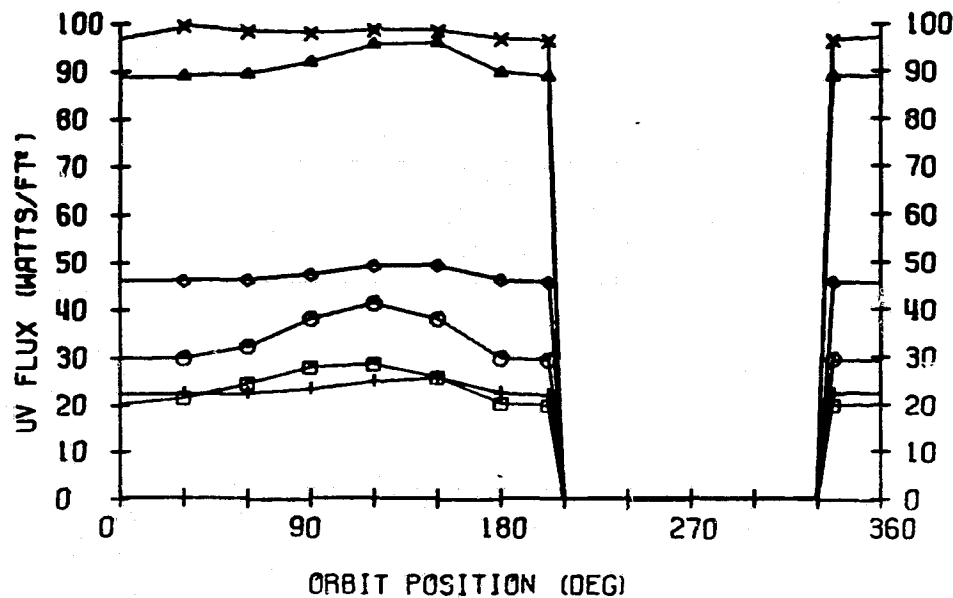
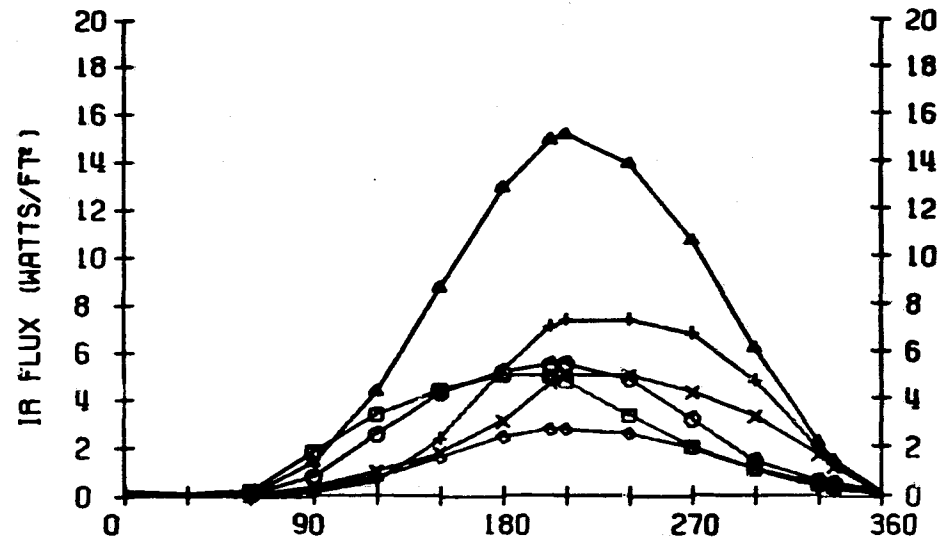
ORBIT POSITION (DEG)

250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3

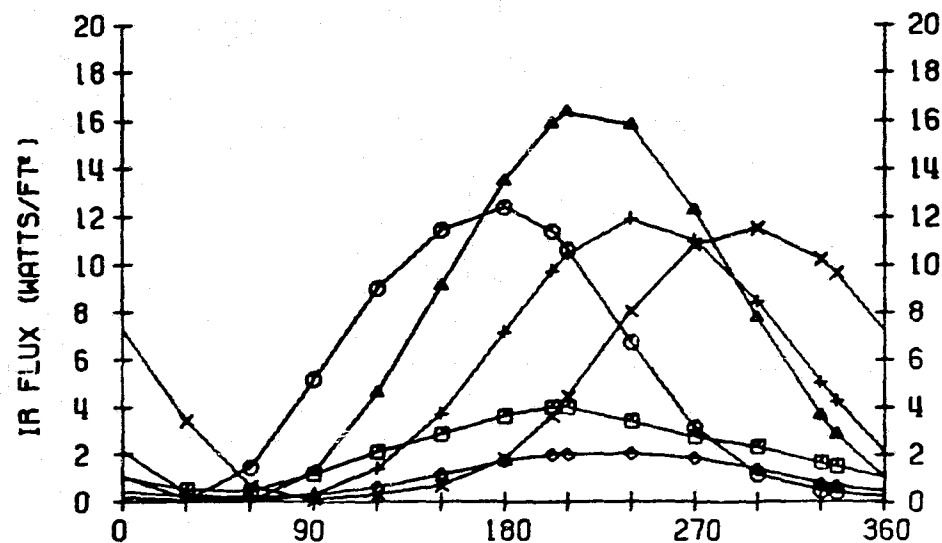


LOCATION 4

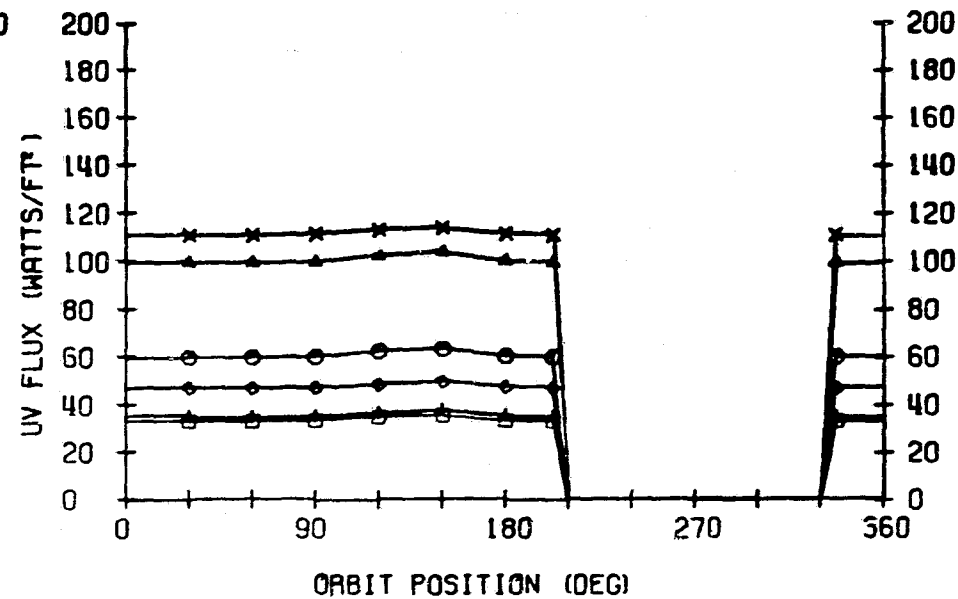
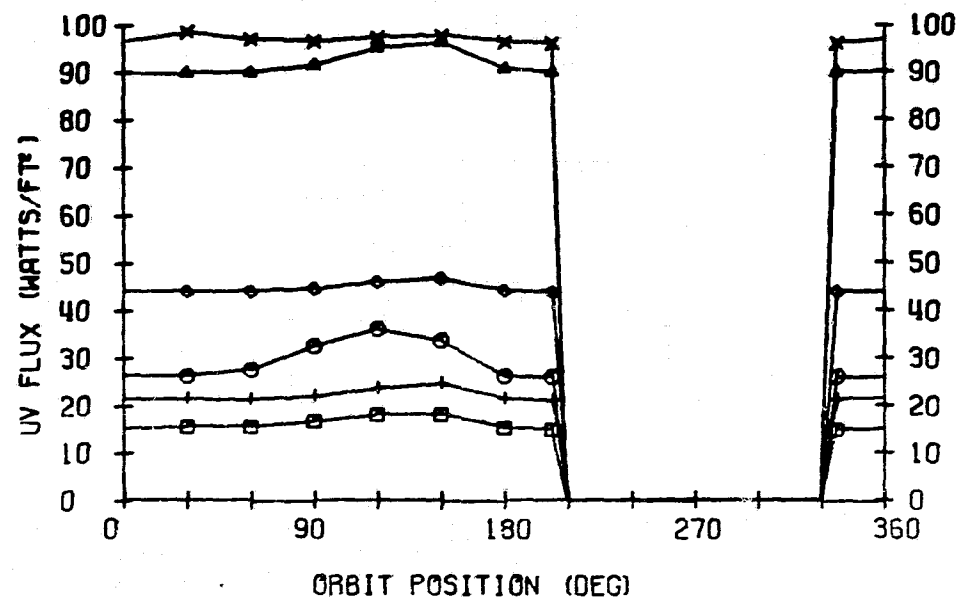
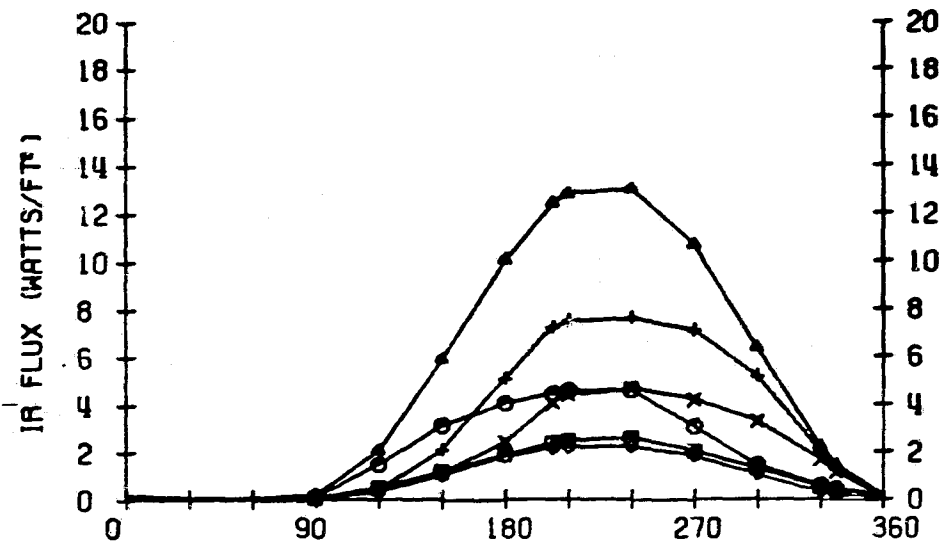


250 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * DELTA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

	SURFACE DIRECTION	LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
I	+X (□)	20.1	20.9	14.2	24.6	21.2	30.0
R	+Y (○)	25.8	22.0	14.1	32.5	16.2	35.5
F	+Z (△)	0.4	0.3	0.2	5.9	2.5	11.1
L	-X (+)	20.5	20.1	15.8	24.1	14.1	25.3
U	-Y (X)	15.8	14.3	9.8	23.2	11.7	20.0
X	-Z (◇)	31.9	39.4	31.7	31.9	33.3	35.7

FLUX DATA
FOR
ALTITUDE - 250 km
ORIENTATION NO. 5

-y to sun, tail facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

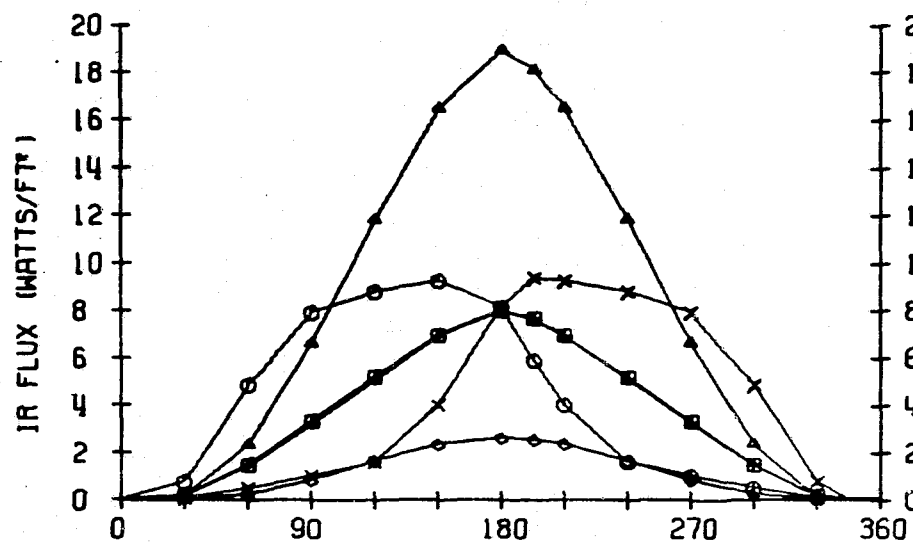
FOR

250 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

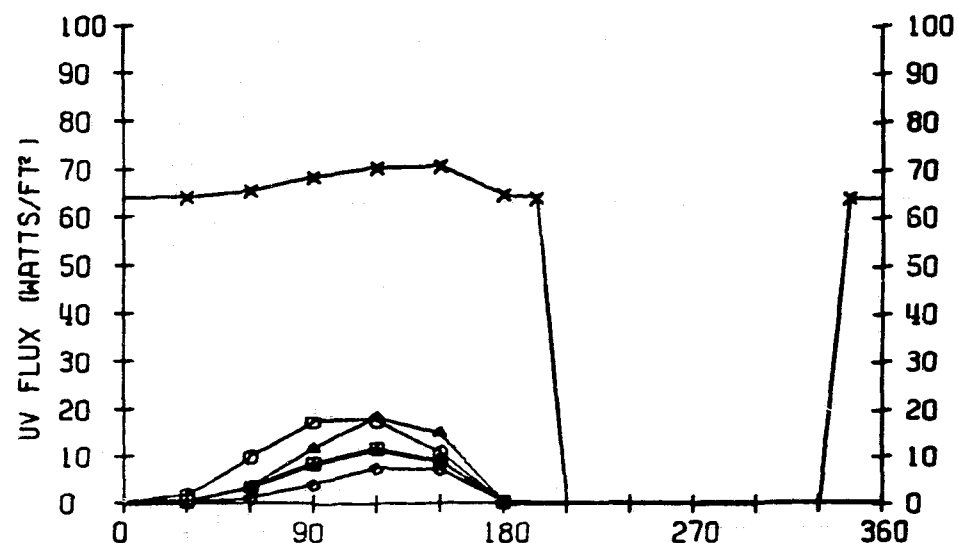
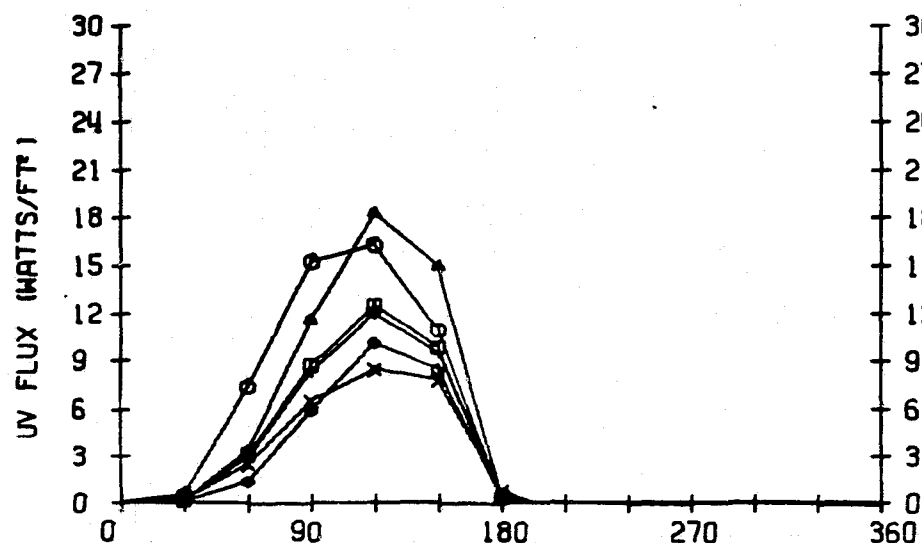
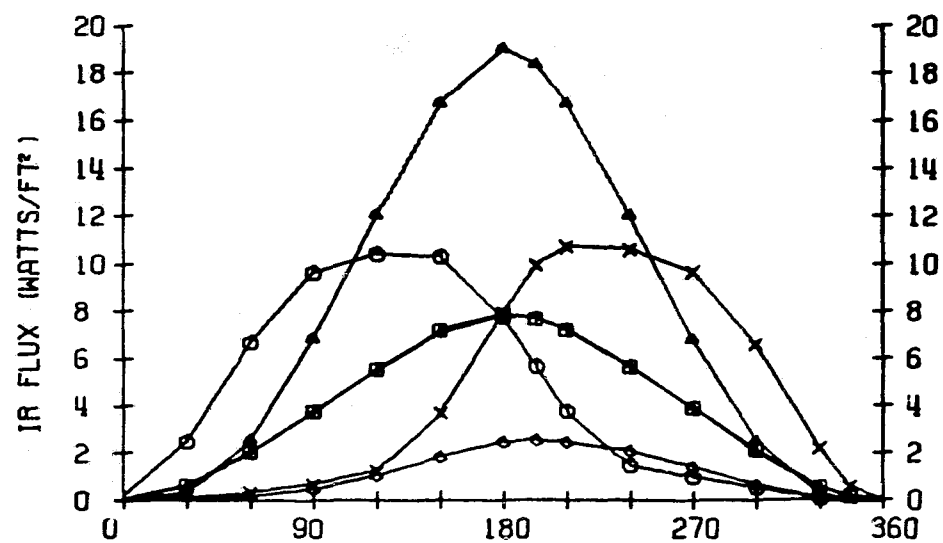
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.5	3.9	4.4	2.6	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.4	5.2	1.9
F	+Z (Δ)	7.8	8.0	8.0	6.7	7.4	5.2
L	-X (+)	3.5	3.9	4.3	2.8	4.5	2.7
U	-Y (X)	3.9	4.5	5.6	2.4	5.2	1.9
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.9
U	+X (□)	2.9	2.8	3.2	2.6	2.6	2.0
V	+Y (○)	4.2	4.9	6.3	2.7	6.0	2.4
F	+Z (Δ)	4.1	4.1	4.1	3.7	4.0	3.3
L	-X (+)	2.8	2.8	3.2	2.6	3.2	2.5
U	-Y (X)	2.2	39.2	74.4	2.6	74.3	2.3
X	-Z (◇)	2.2	1.7	2.2	2.4	2.1	2.0

250 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

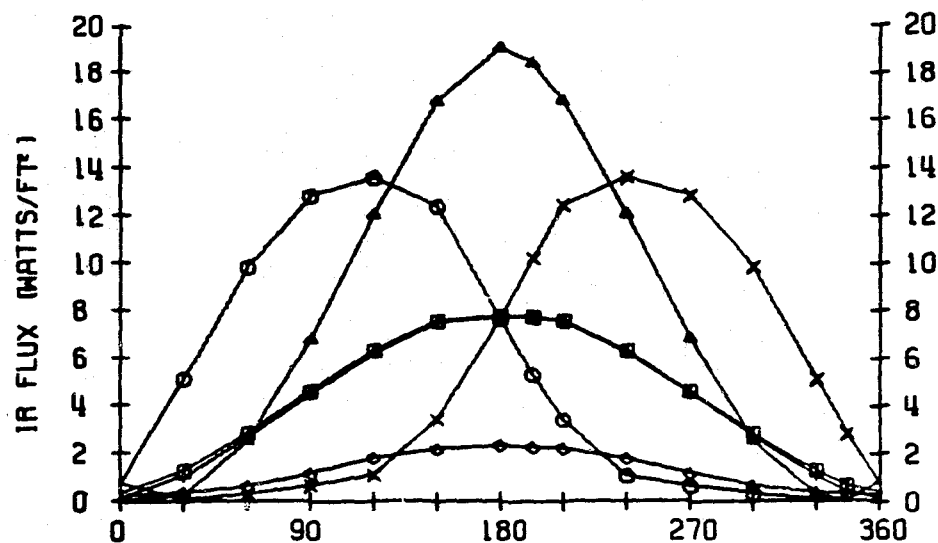


ORBIT POSITION (DEG)

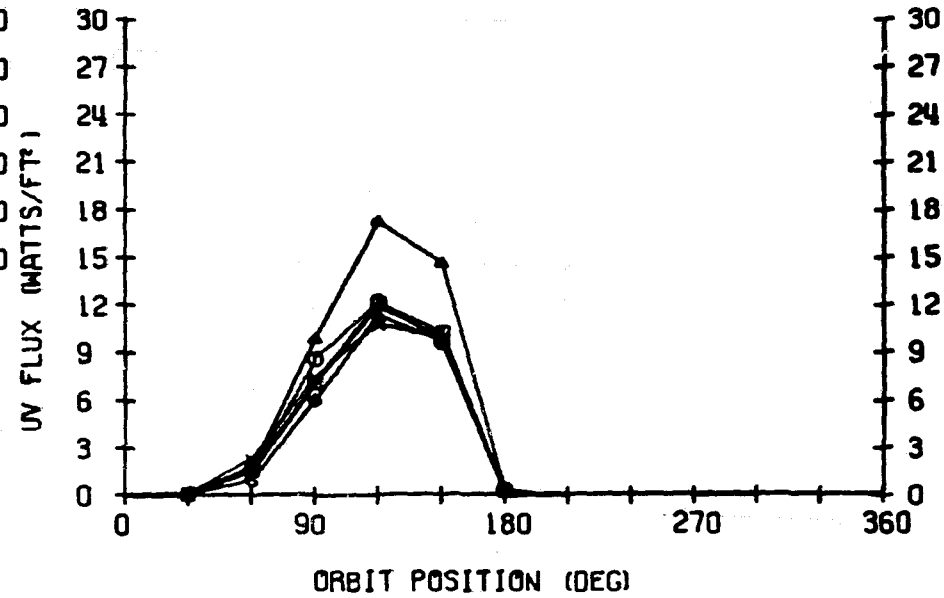
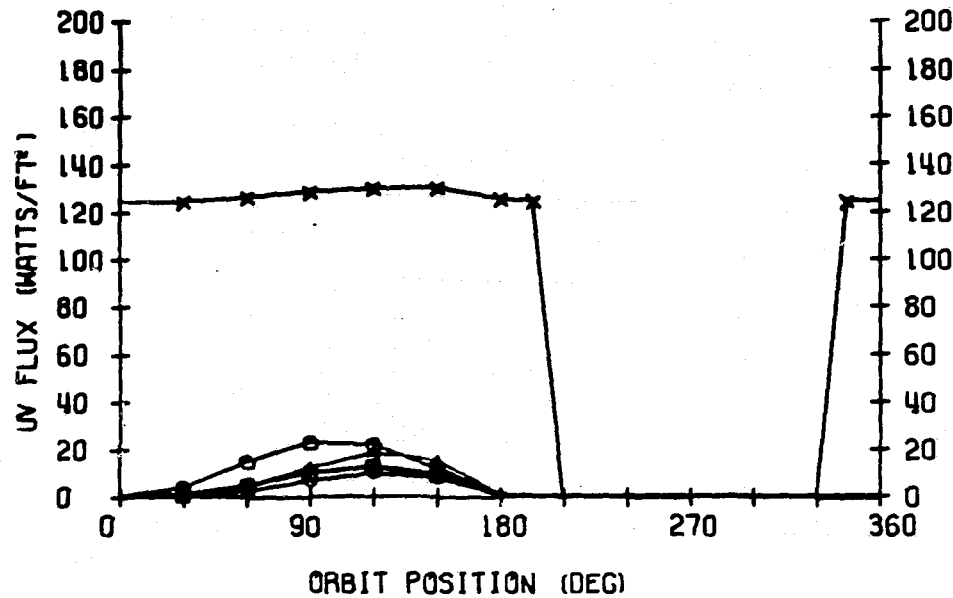
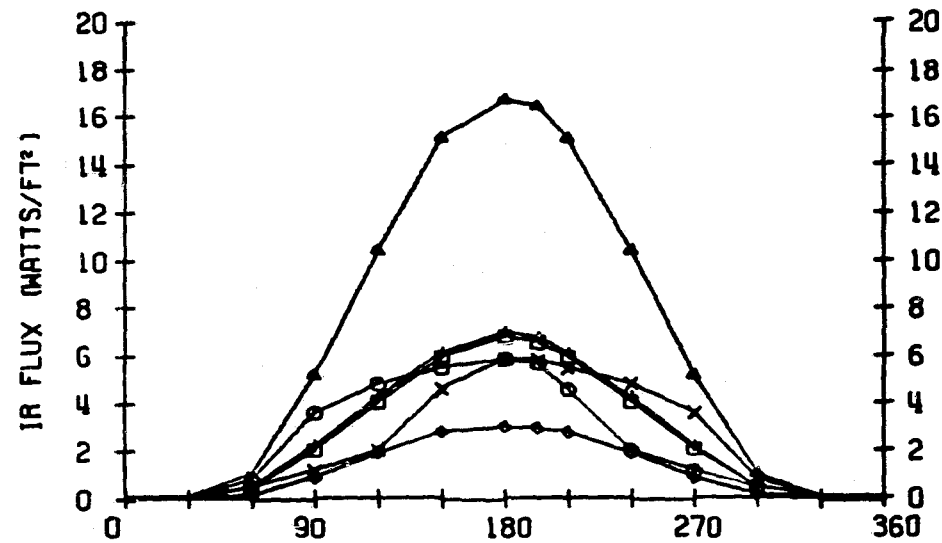
ORBIT POSITION (DEG)

250 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

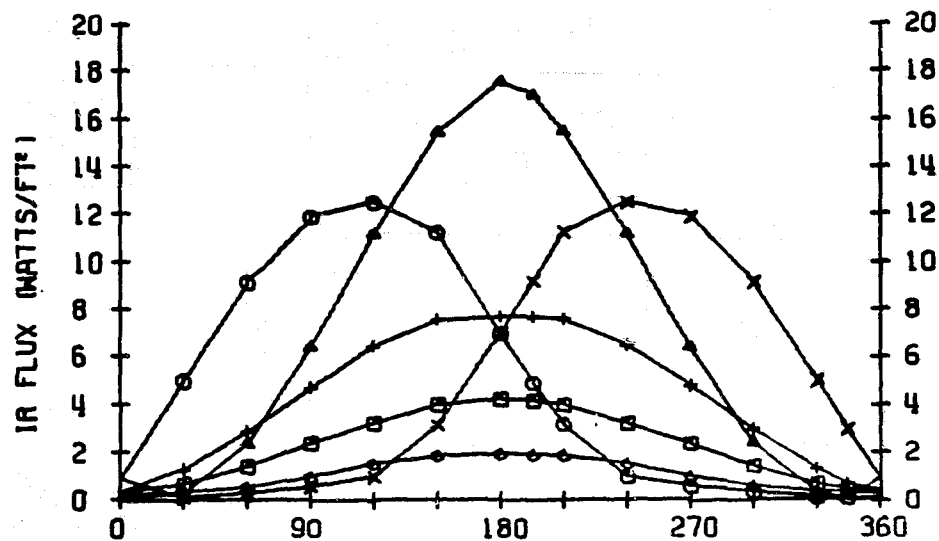


LOCATION 4

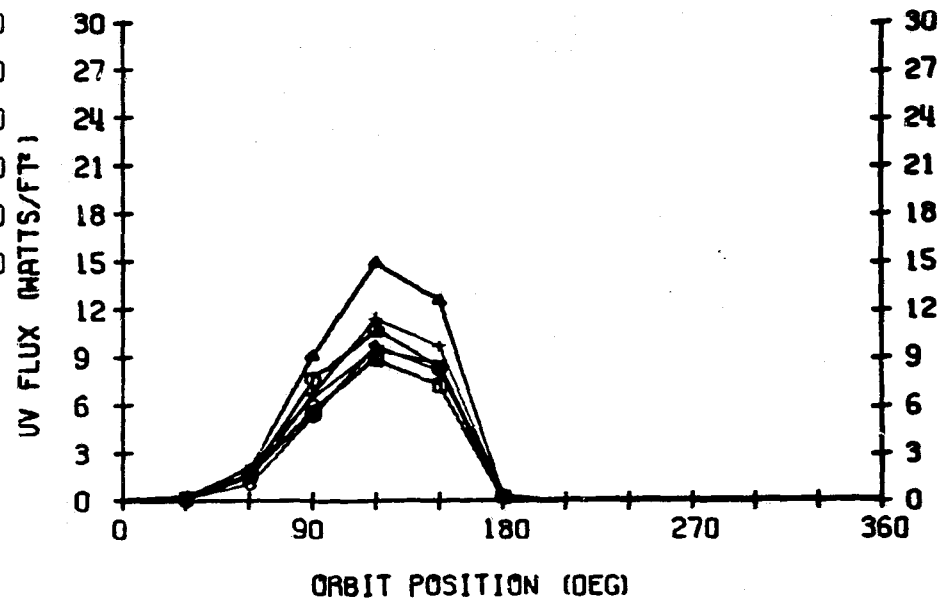
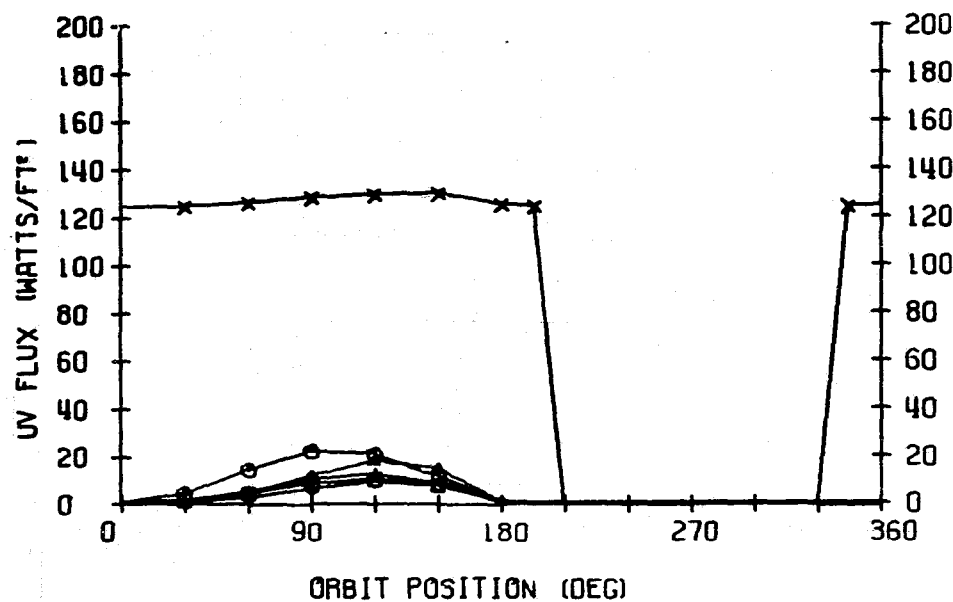
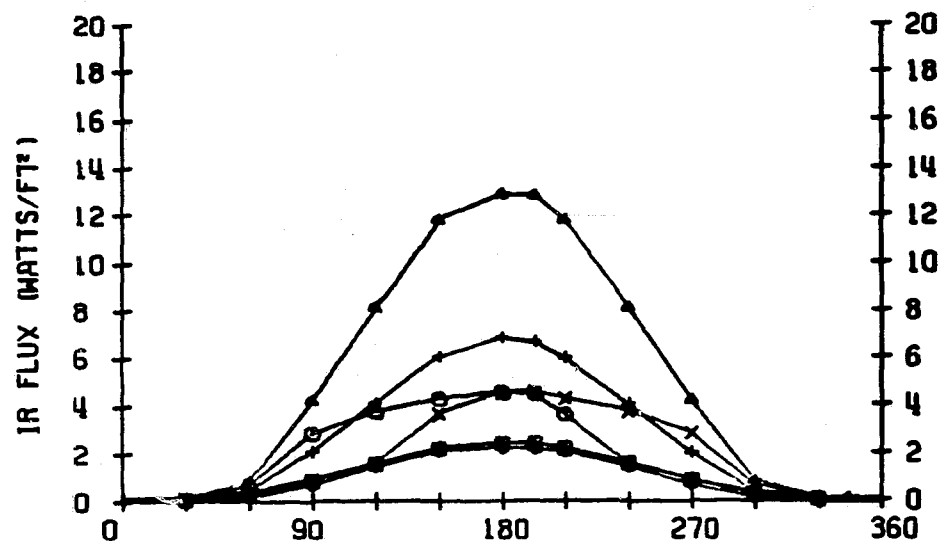


250 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	5.5	4.9	3.9	6.8	7.0	8.8
R	+Y (○)	5.3	4.5	3.0	7.3	3.8	7.8
F	+Z (△)	0.1	0.1	0.1	1.5	0.9	3.3
L	-X (+)	5.3	4.8	4.2	6.5	3.8	6.6
U	-Y (×)	5.8	4.5	3.4	7.6	4.0	8.1
X	-Z (◇)	8.7	9.0	8.4	9.2	8.9	9.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

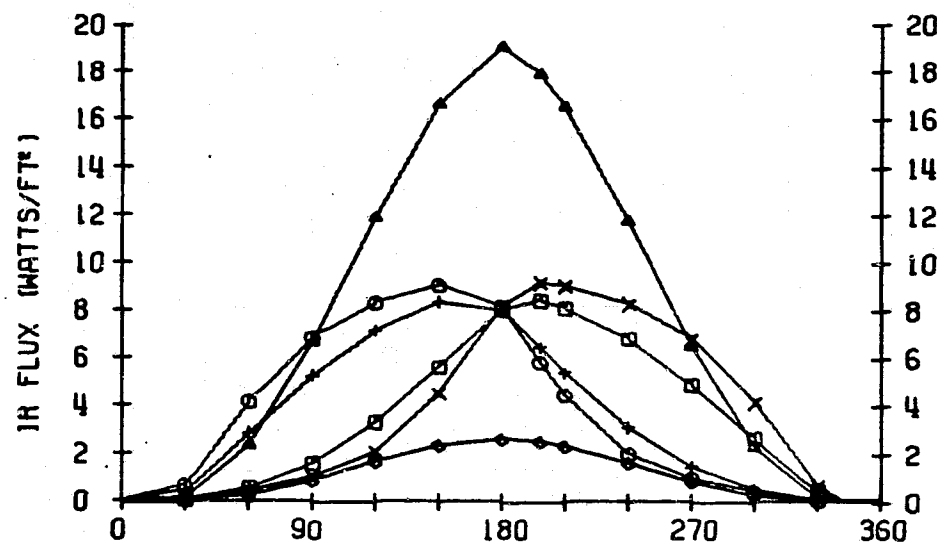
FOR

250 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

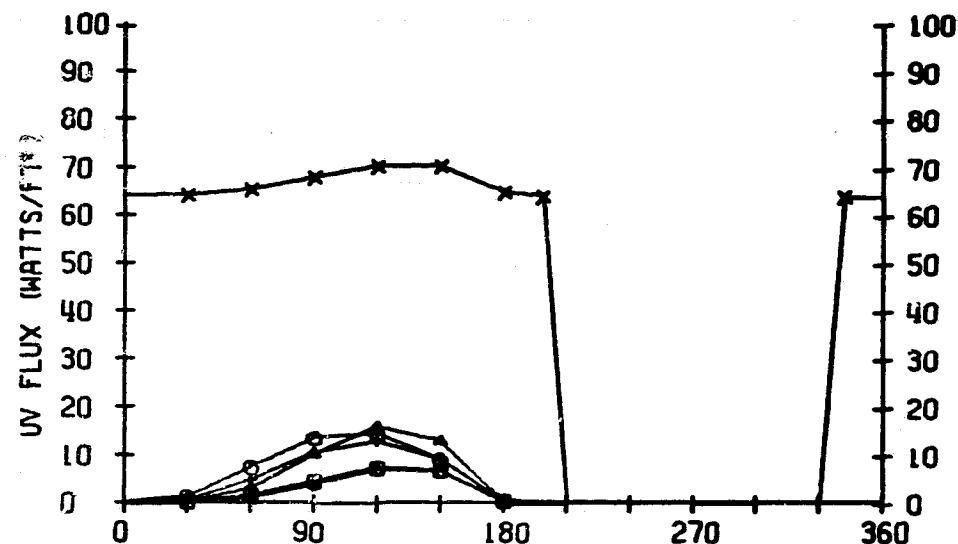
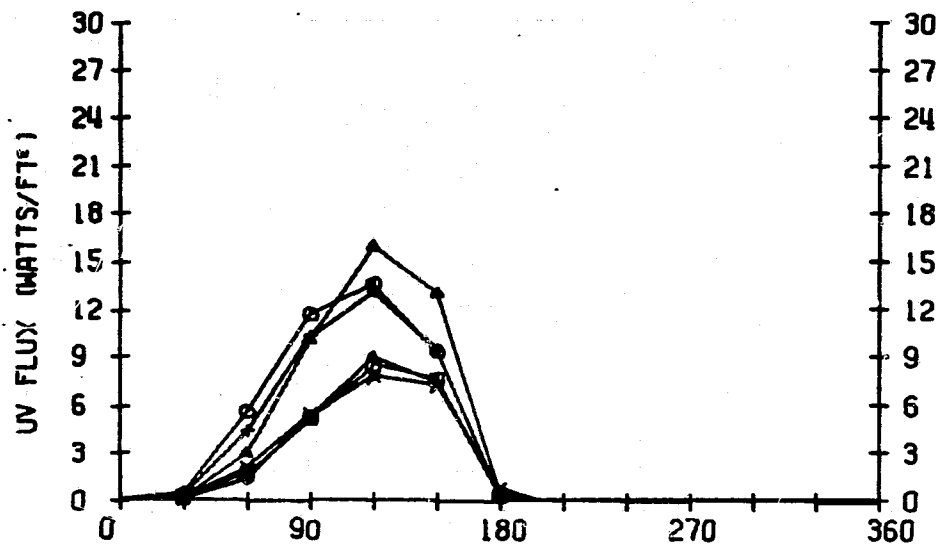
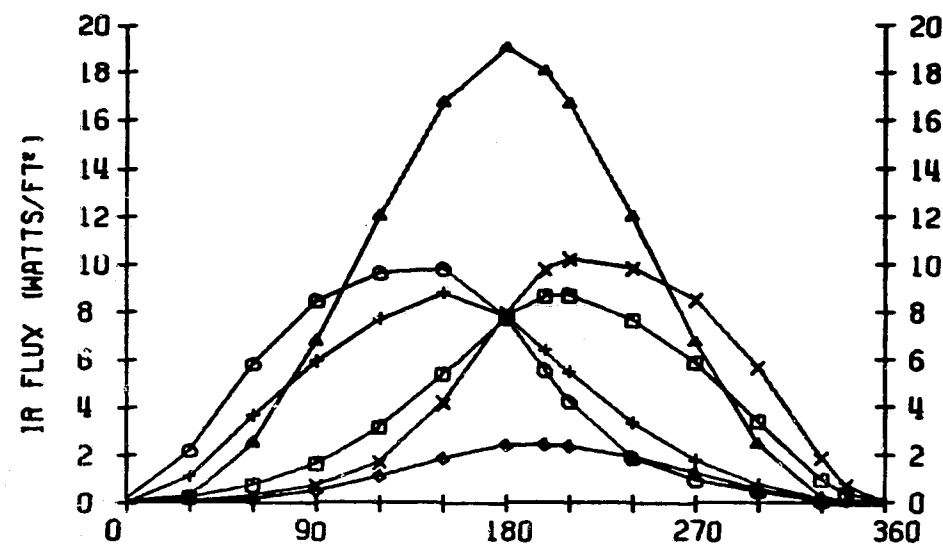
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.5	3.8	4.3	2.7	2.3	1.0
R	+Y (○)	3.8	4.3	5.3	2.4	5.2	1.9
F	+Z (△)	7.8	7.9	7.9	6.7	7.3	5.3
L	-X (+)	3.6	3.9	4.4	2.9	4.5	2.9
U	-Y (X)	3.8	4.2	5.3	2.4	4.8	1.9
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.9
U	+X (□)	2.0	1.7	1.9	2.0	2.7	2.2
V	+Y (○)	3.4	3.9	5.0	2.4	5.3	2.5
F	+Z (△)	3.5	3.6	3.6	3.3	3.8	3.4
L	-X (+)	3.2	3.3	3.8	2.8	3.9	3.1
U	-Y (X)	1.9	40.1	76.2	2.3	76.4	2.4
X	-Z (◇)	1.9	1.6	2.0	2.1	2.2	2.2

250 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

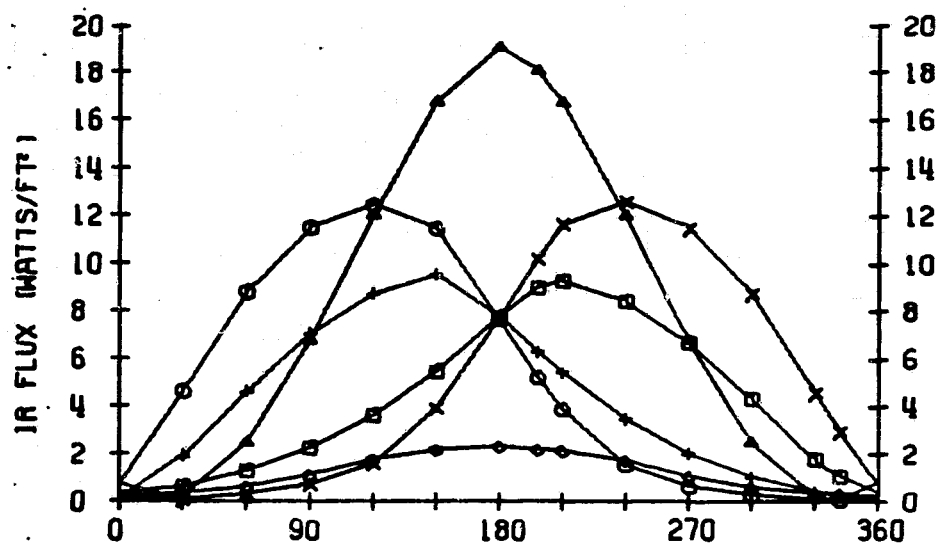


ORBIT POSITION (DEG)

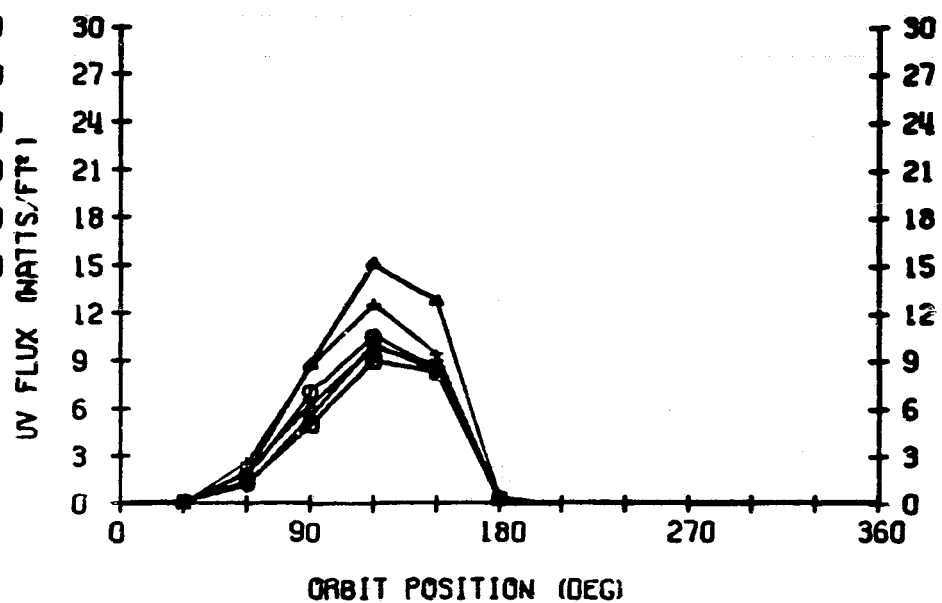
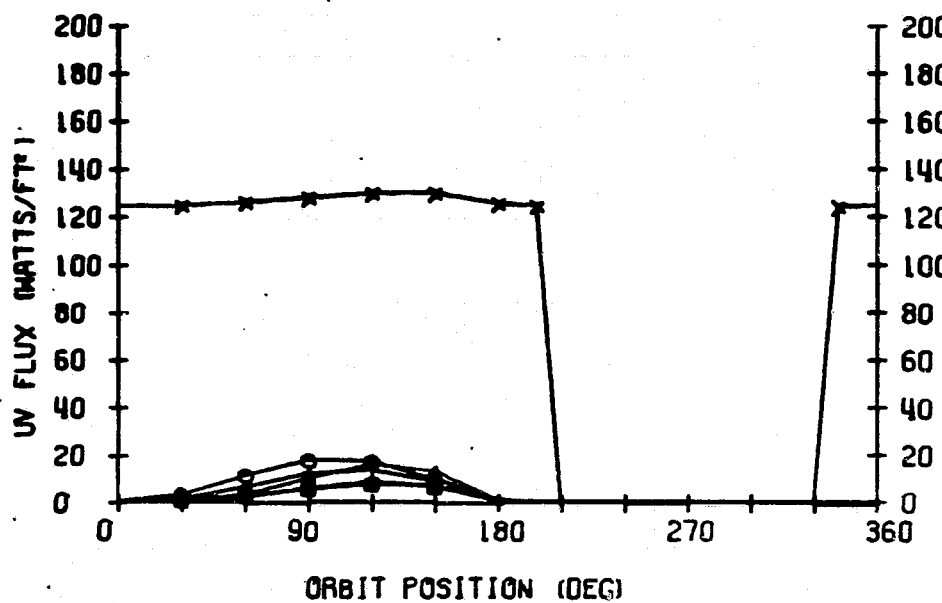
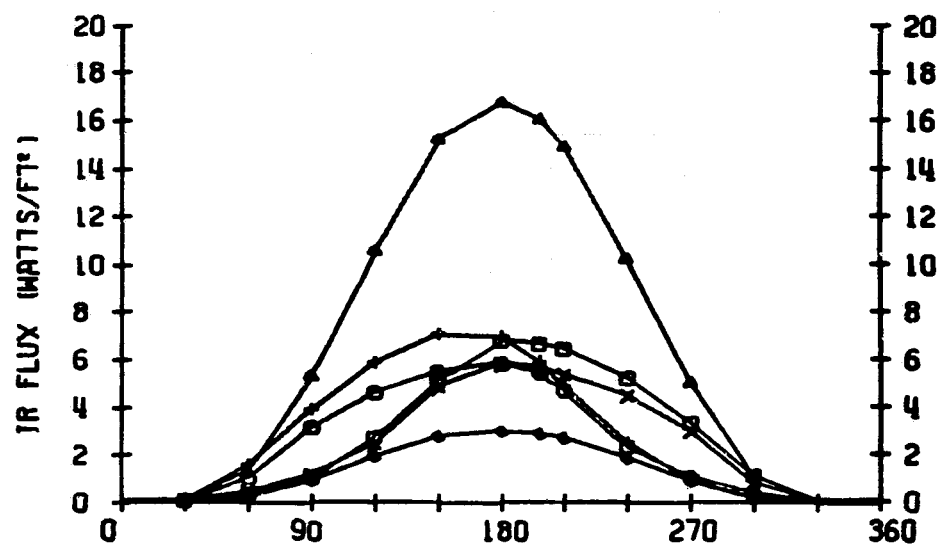
ORBIT POSITION (DEG)

250 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

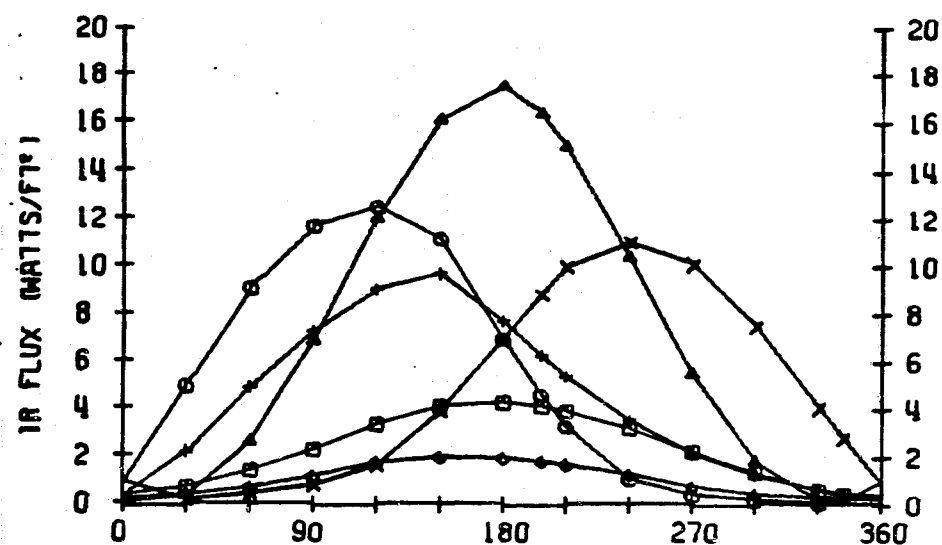


LOCATION 4

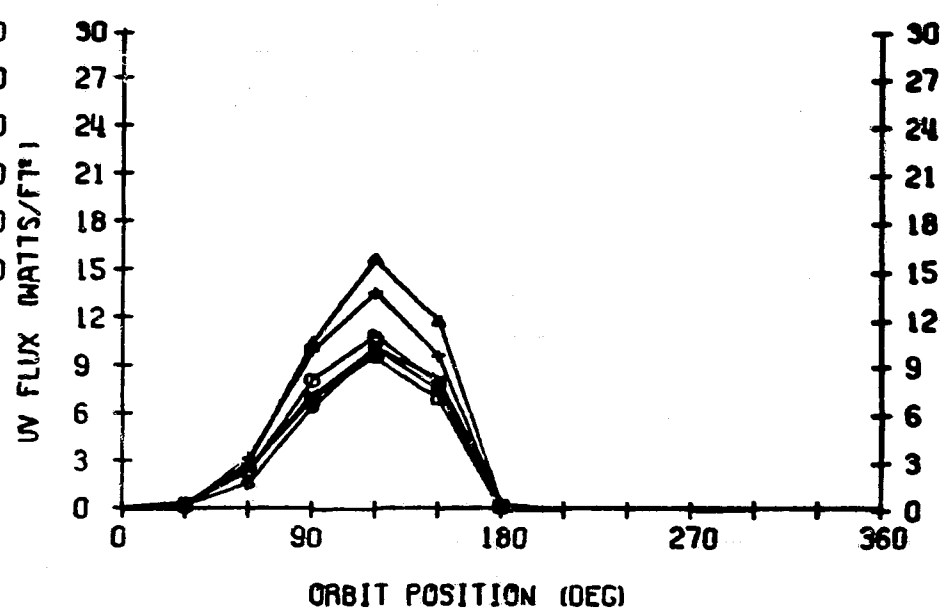
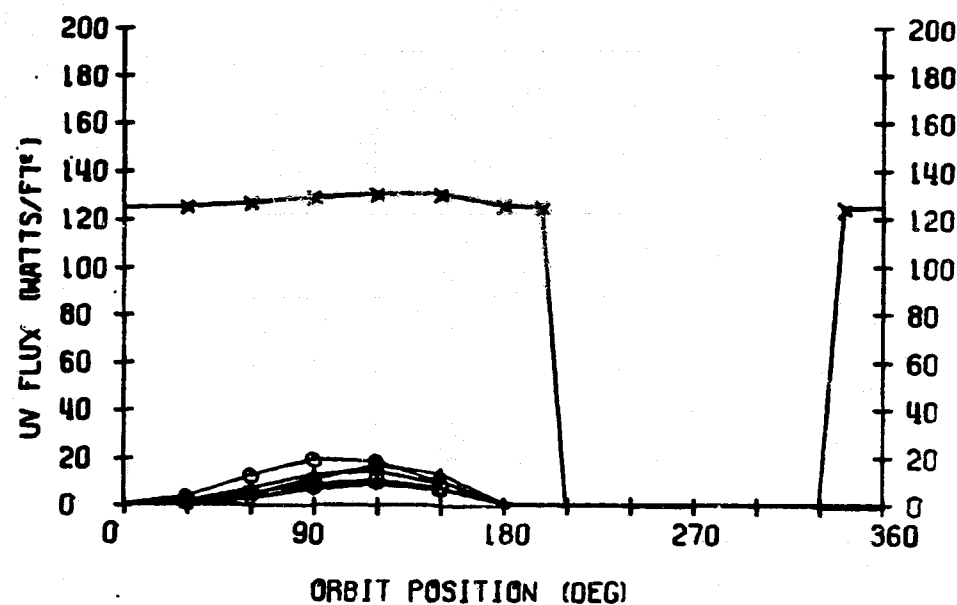
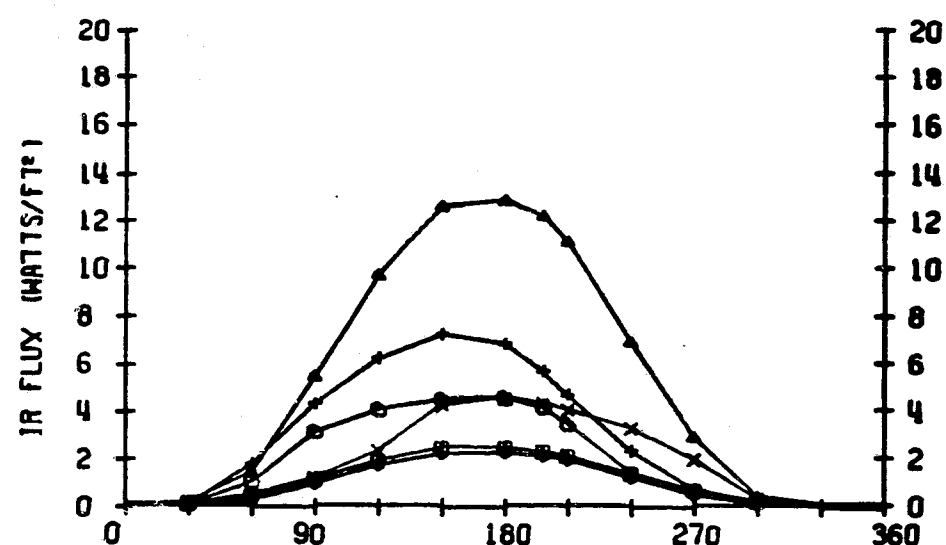


250 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



**ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)**

FOR

250 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	5.4	4.8	3.9	6.7	7.1	8.9
R	+Y (○)	5.2	4.4	2.9	7.1	3.8	7.9
F	+Z (△)	0.1	0.1	0.1	1.5	0.9	3.4
L	-X (+)	5.1	4.6	4.0	6.3	3.7	6.6
U	-Y (X)	5.5	4.4	3.3	7.4	4.0	8.2
X	-Z (◇)	8.5	8.7	8.2	9.0	9.0	9.5

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

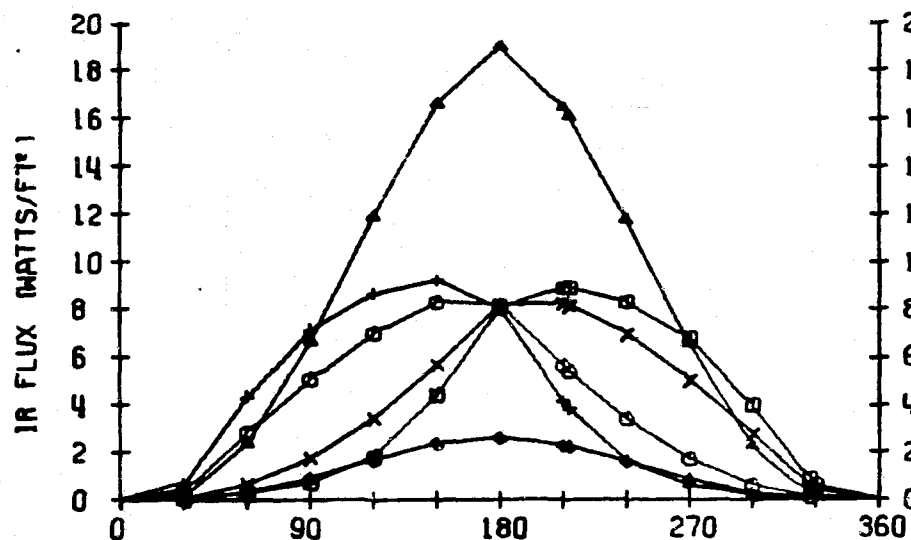
FOR

250 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

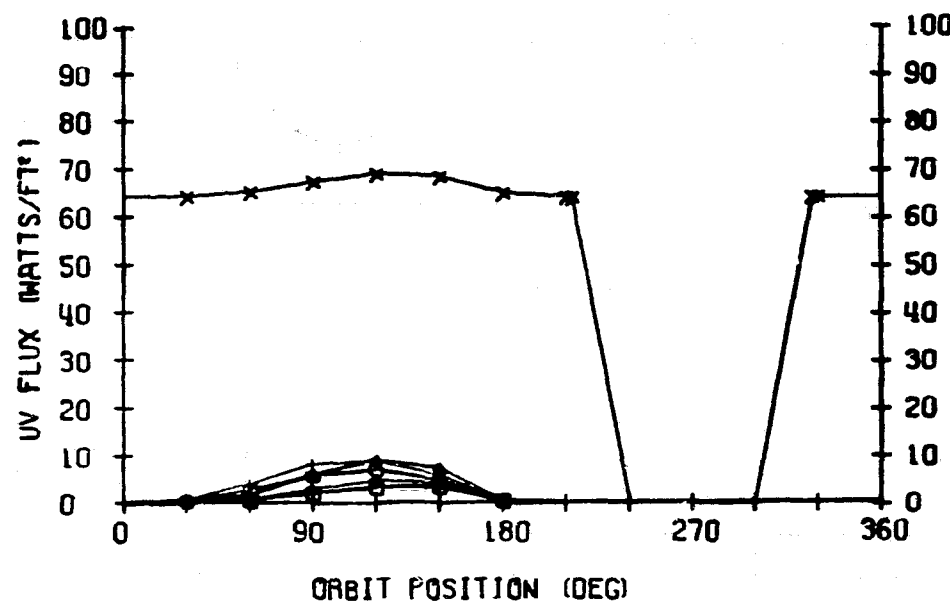
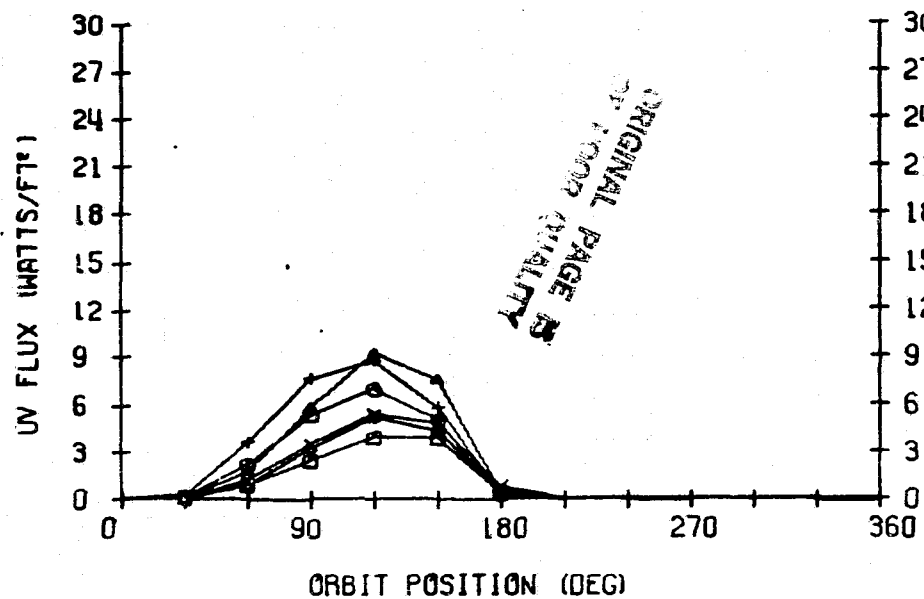
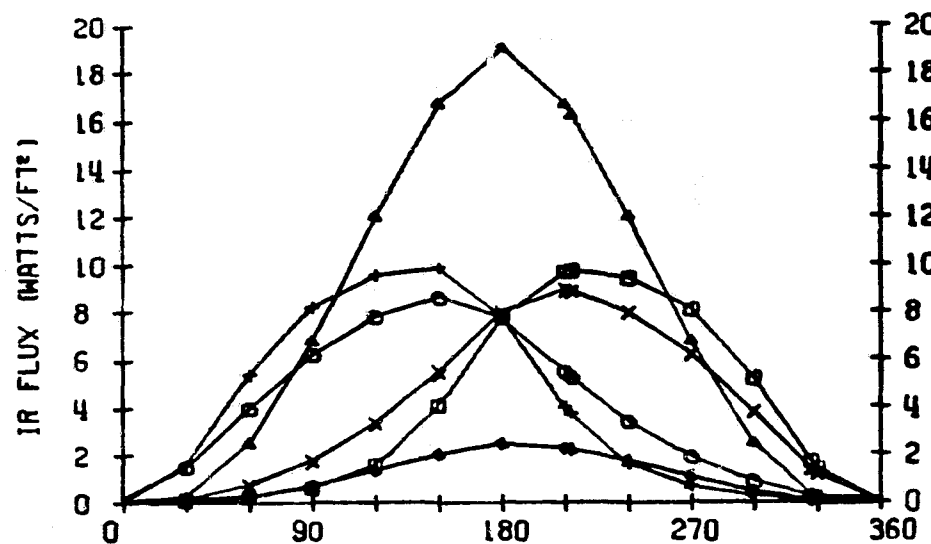
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.7	4.0	4.5	2.8	2.2	1.1
R	+Y (○)	3.6	4.0	4.7	2.4	4.5	1.9
F	+Z (Δ)	7.8	7.9	7.9	6.8	7.3	5.3
L	-X (+)	3.7	4.1	4.7	3.0	4.8	3.1
U	-Y (x)	3.6	3.9	4.8	2.4	4.2	1.9
X	-Z (◇)	1.1	1.0	1.1	1.2	1.0	0.9
U	+X (□)	1.0	0.8	0.8	1.1	1.7	1.5
V	+Y (○)	1.7	1.8	2.1	1.4	2.4	1.6
F	+Z (Δ)	2.1	2.1	2.1	2.0	2.3	2.3
L	-X (+)	2.2	2.4	2.8	1.9	2.9	2.2
U	-Y (x)	1.3	44.9	86.0	1.4	86.3	1.6
X	-Z (◇)	1.2	1.0	1.1	1.3	1.4	1.4

250 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

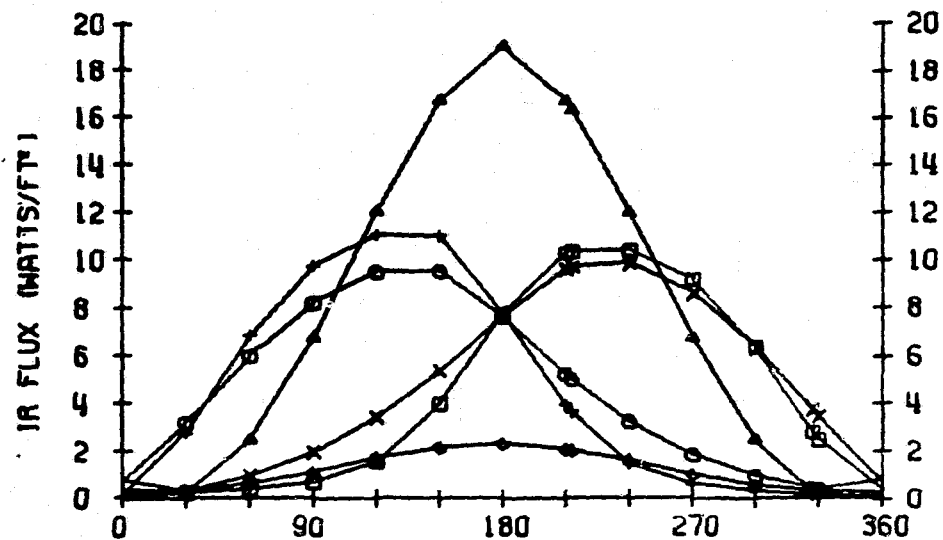


LOCATION 2

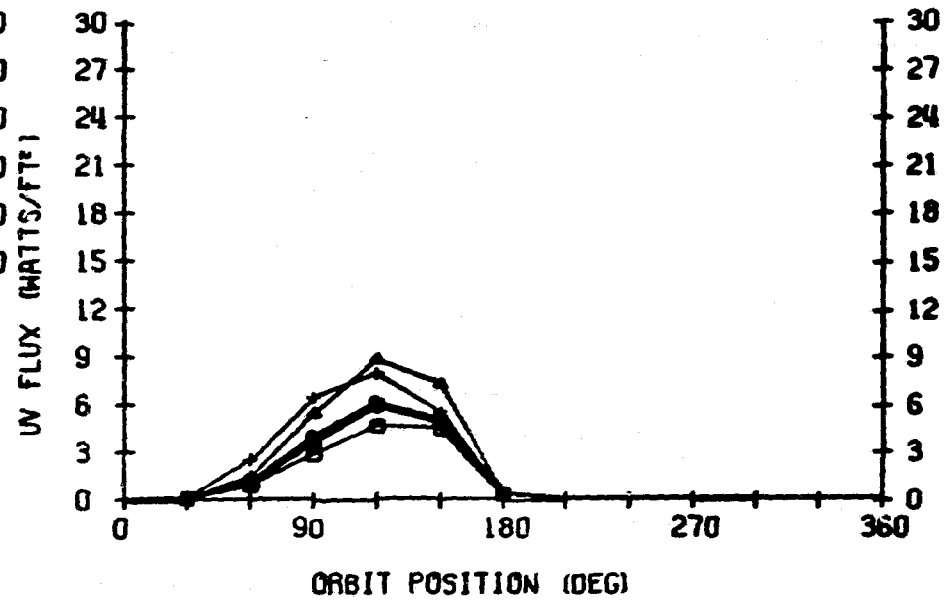
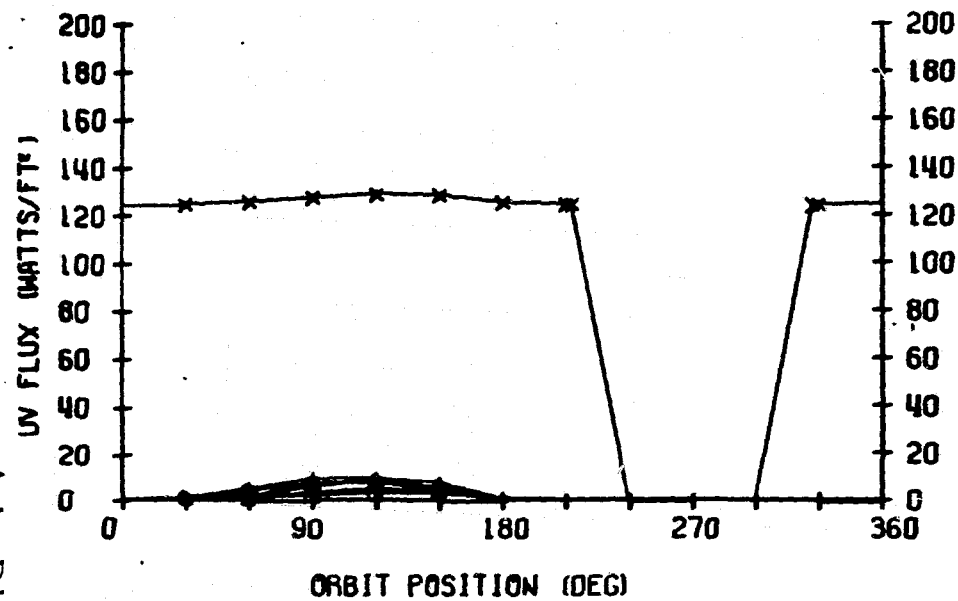
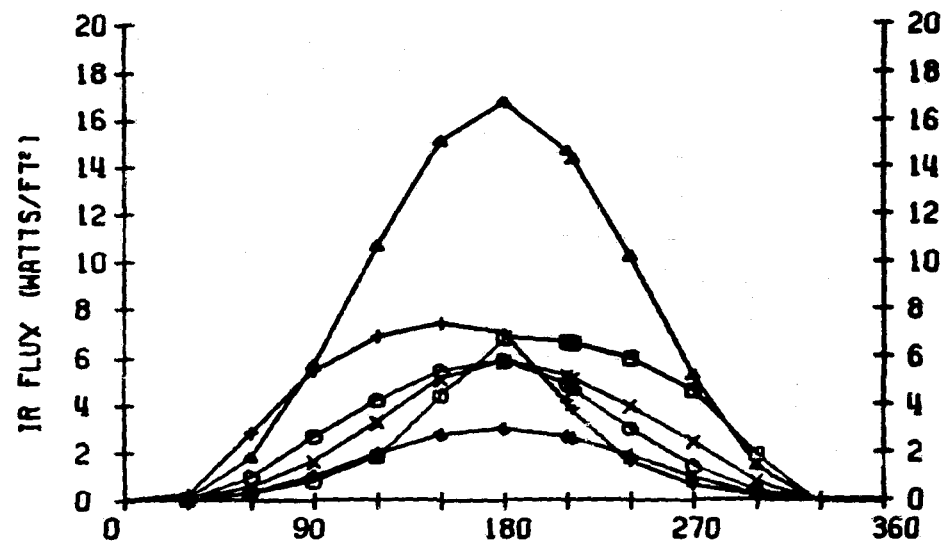


250 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

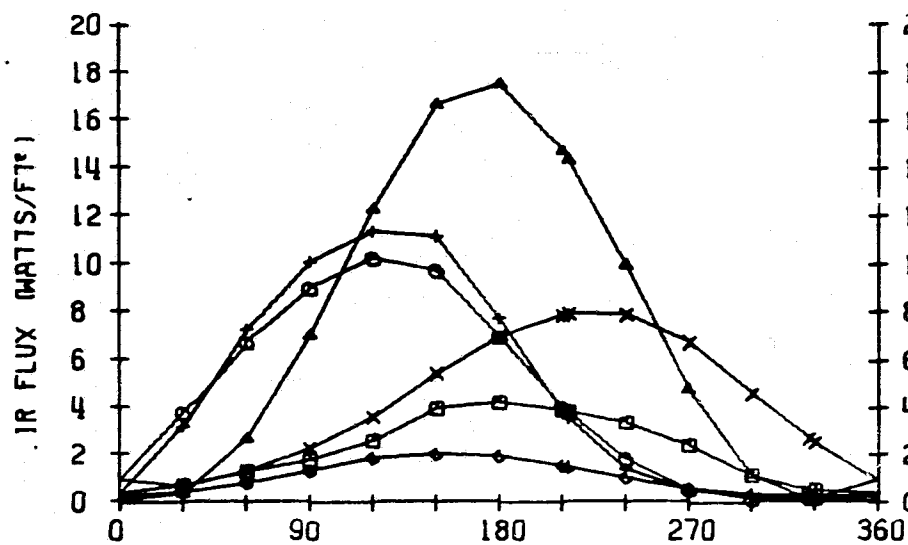


LOCATION 4

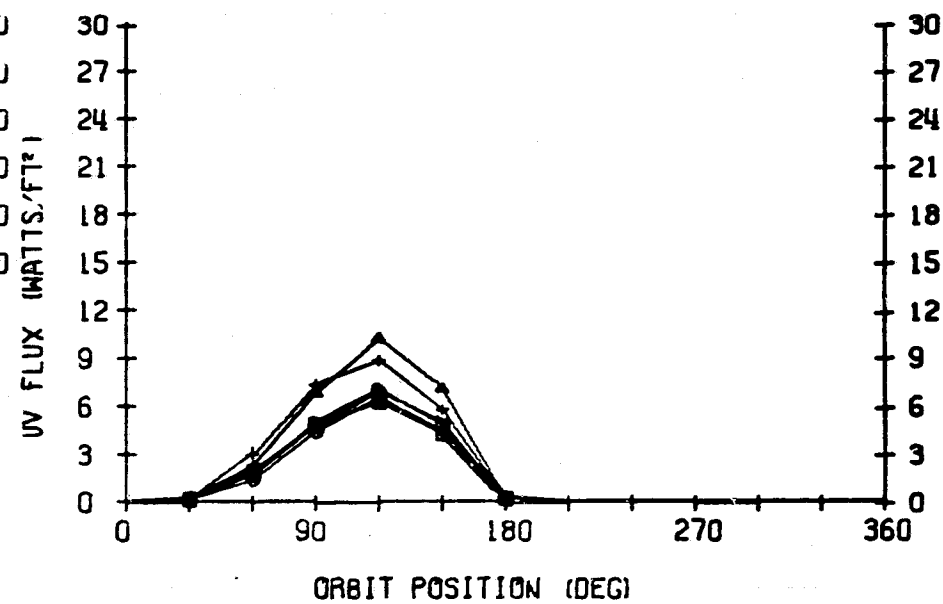
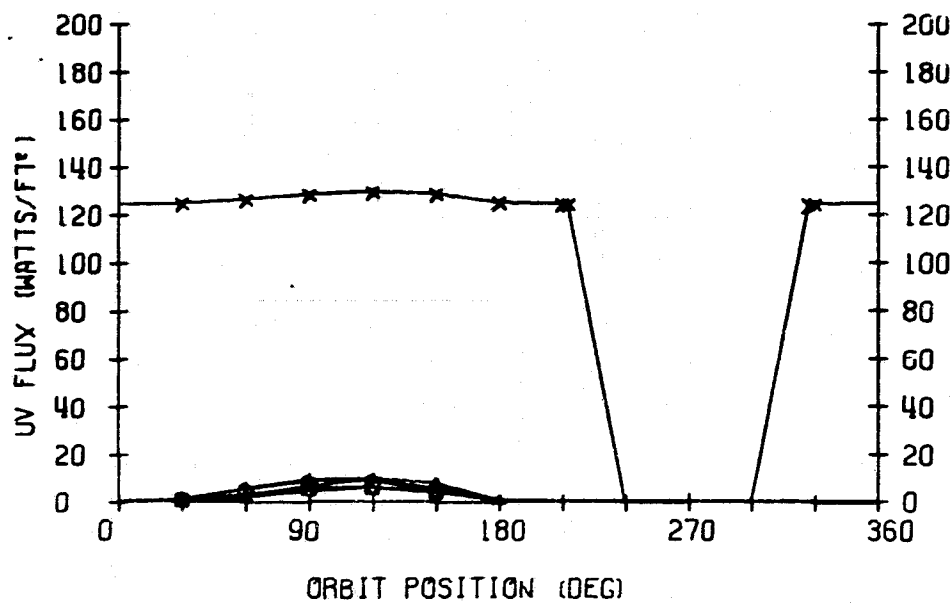
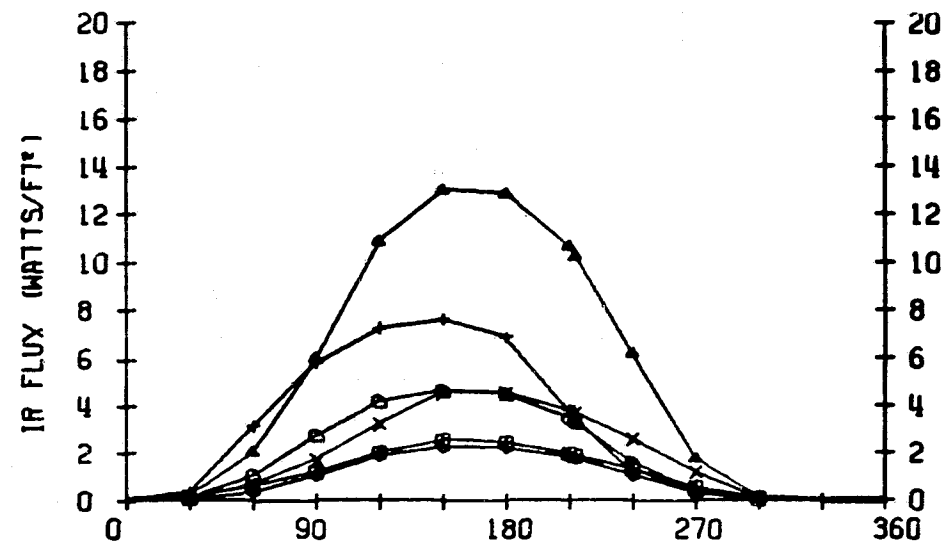


250 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



**ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)**

FOR

250 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	5.0	4.4	3.6	6.2	6.8	8.4
R	+Y (○)	4.8	4.0	2.7	6.6	3.6	7.4
F	+Z (△)	0.1	0.1	0.1	1.4	0.9	3.2
L	-X (+)	4.6	4.2	3.7	5.8	3.4	6.1
U	-Y (X)	5.0	4.0	2.9	6.7	3.7	7.6
X	-Z (◇)	7.8	8.0	7.5	8.4	8.4	8.9

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

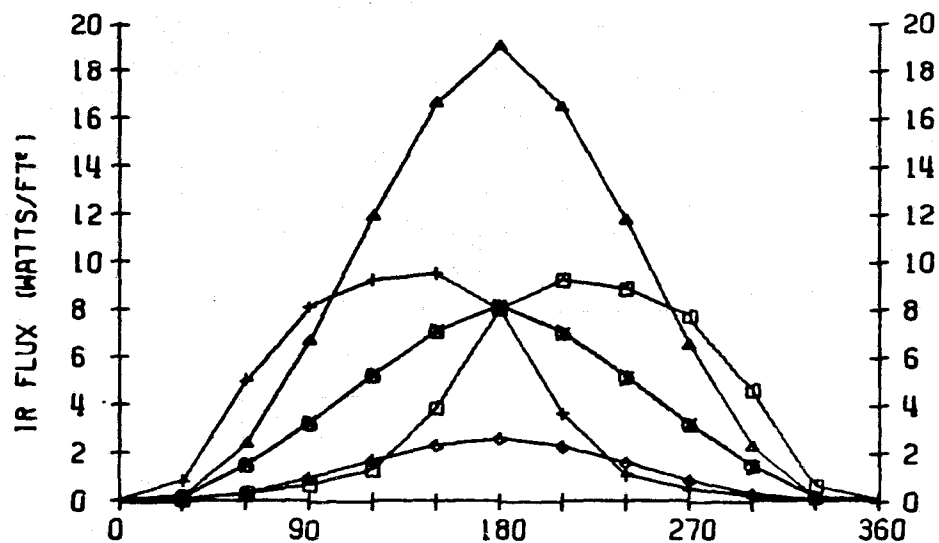
FOR

250 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

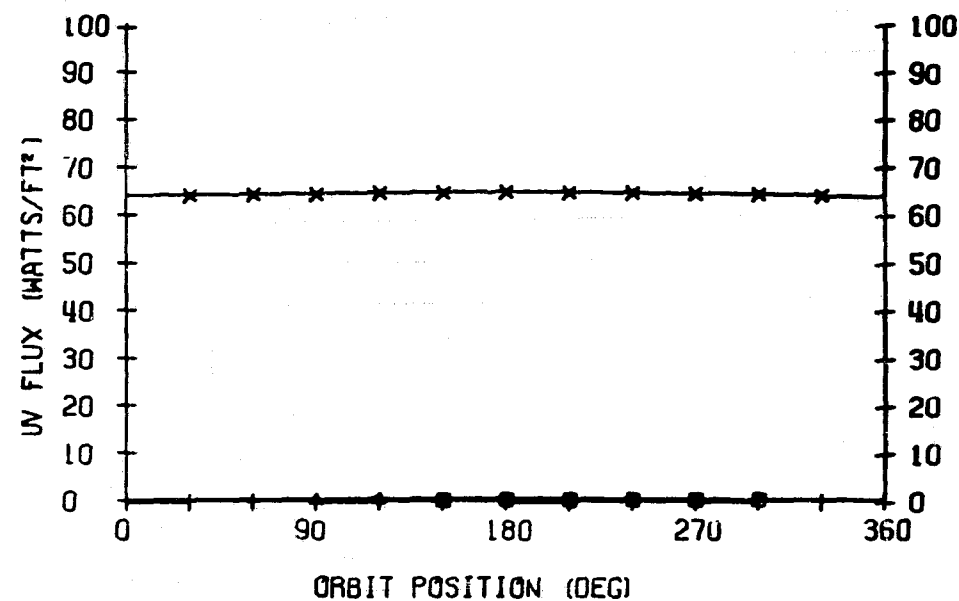
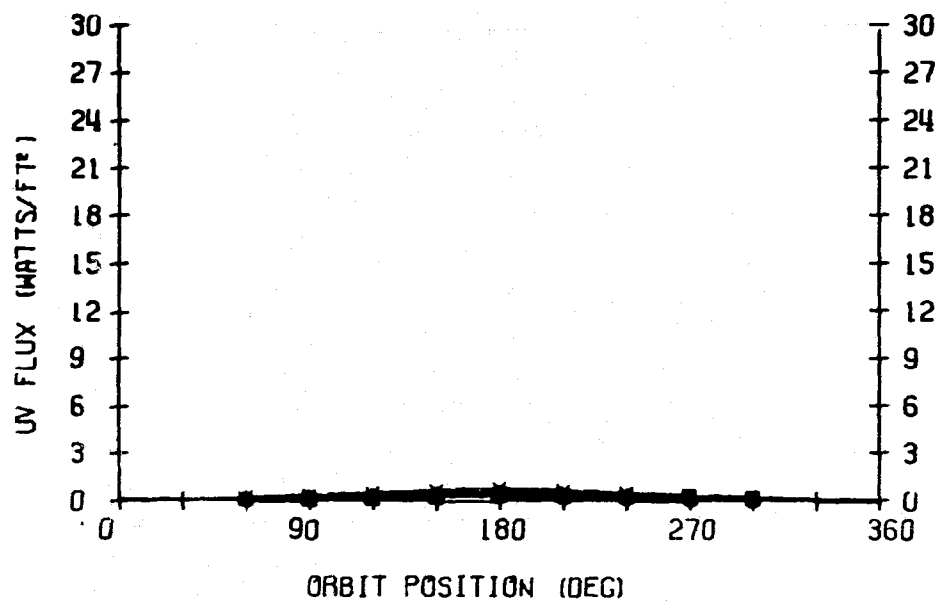
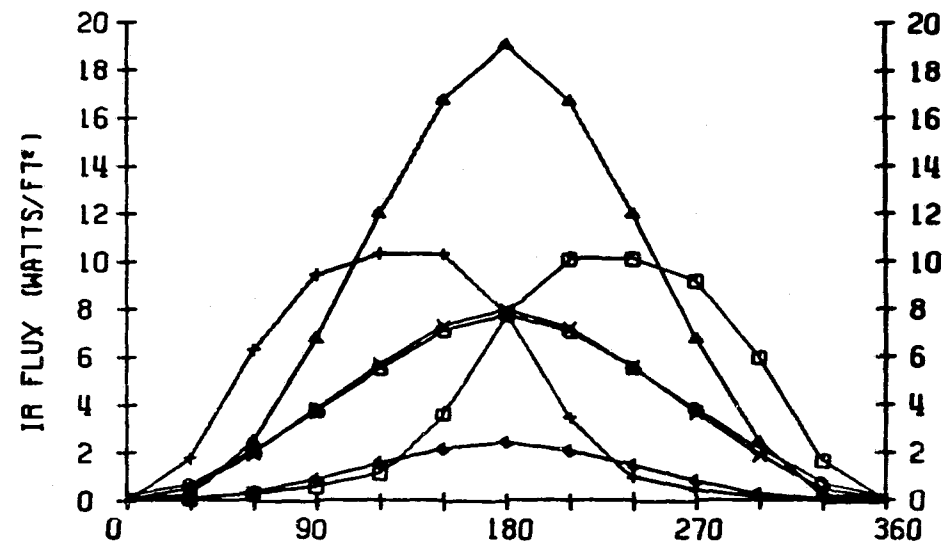
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.8	4.2	4.7	2.8	2.2	1.1
R	+Y (○)	3.5	3.9	4.5	2.4	4.0	1.9
F	+Z (Δ)	7.8	7.9	7.9	6.8	7.2	5.3
L	-X (+)	3.9	4.3	4.9	3.1	5.1	3.1
U	-Y (x)	3.5	3.8	4.5	2.4	4.0	1.9
X	-Z (◇)	1.1	1.0	1.1	1.2	0.9	0.9
U	+X (□)	0.2	0.2	0.2	0.1	0.2	0.1
V	+Y (○)	0.1	0.1	0.1	0.1	0.1	0.1
F	+Z (Δ)	0.2	0.2	0.2	0.2	0.2	0.2
L	-X (+)	0.2	0.2	0.2	0.1	0.2	0.1
U	-Y (x)	0.3	64.5	124.9	0.2	124.9	0.1
X	-Z (◇)	0.1	0.2	0.1	0.1	0.1	0.1

250 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

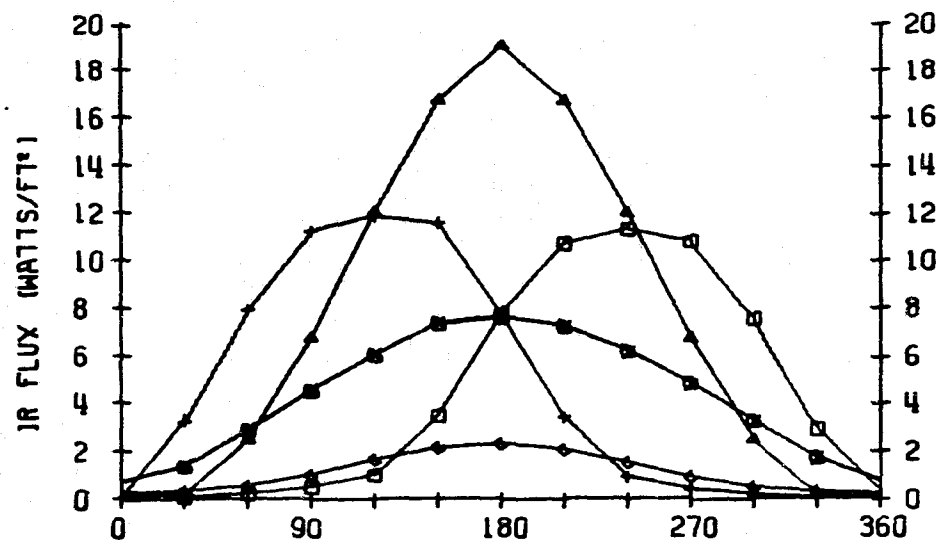


LOCATION 2

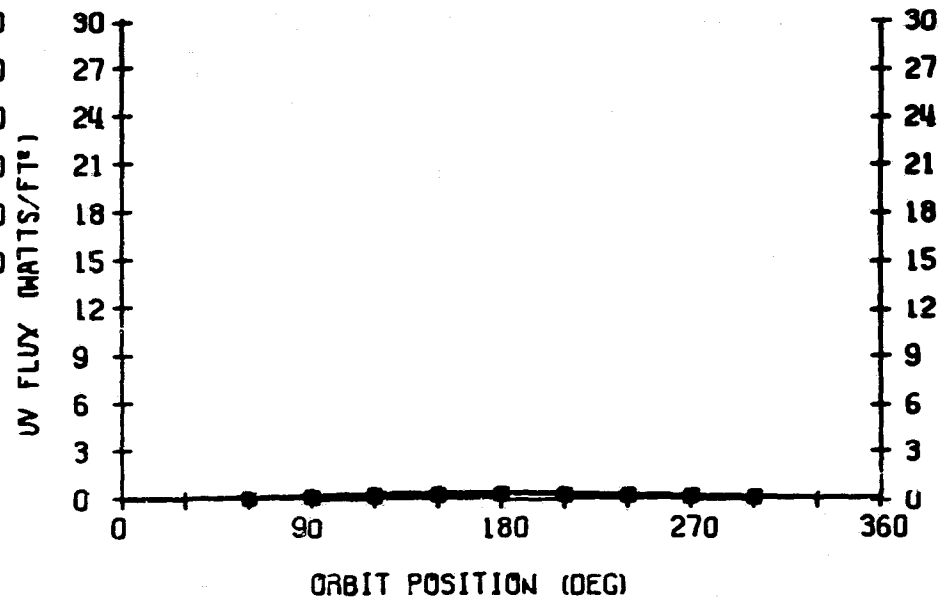
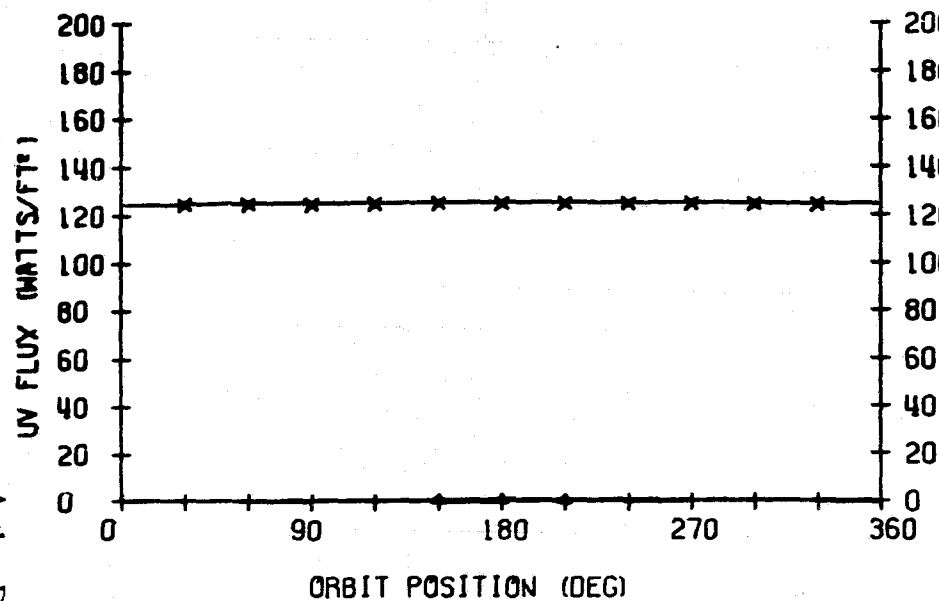
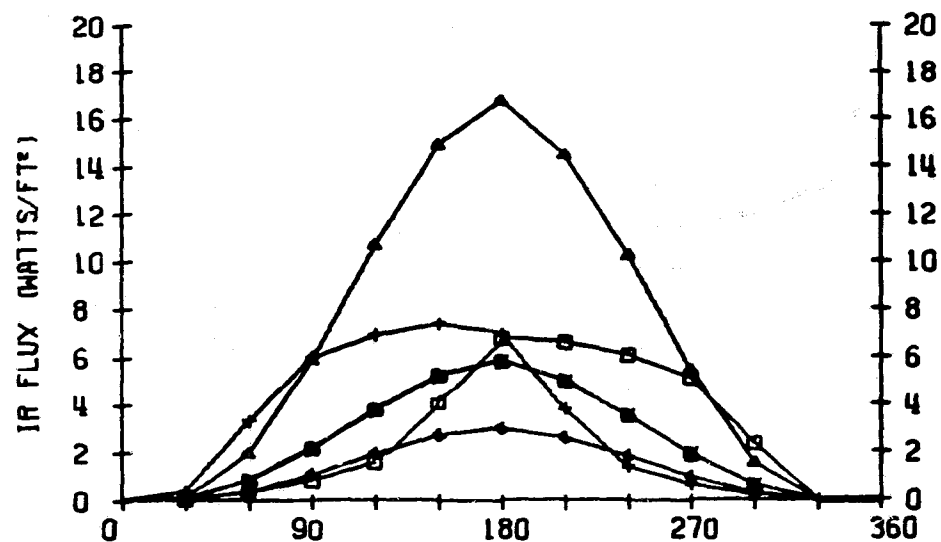


250 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

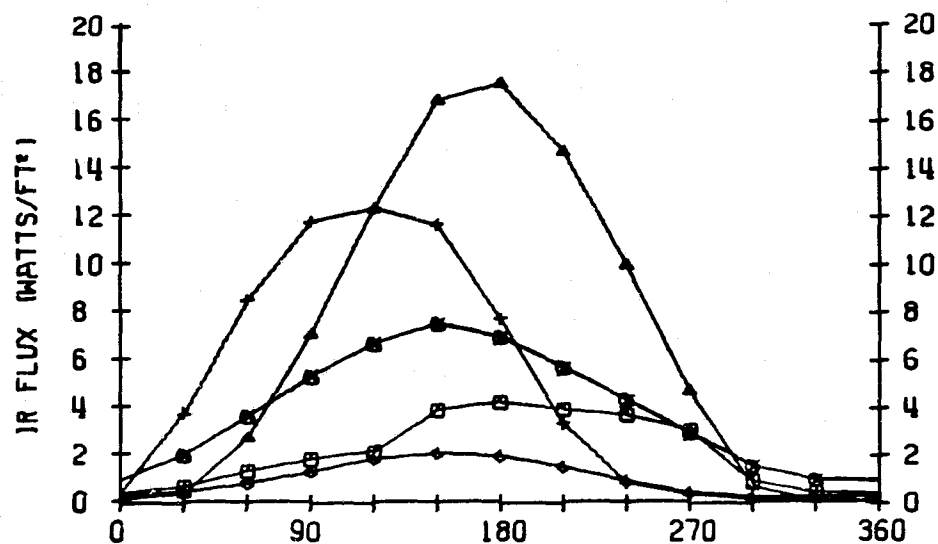


LOCATION 4

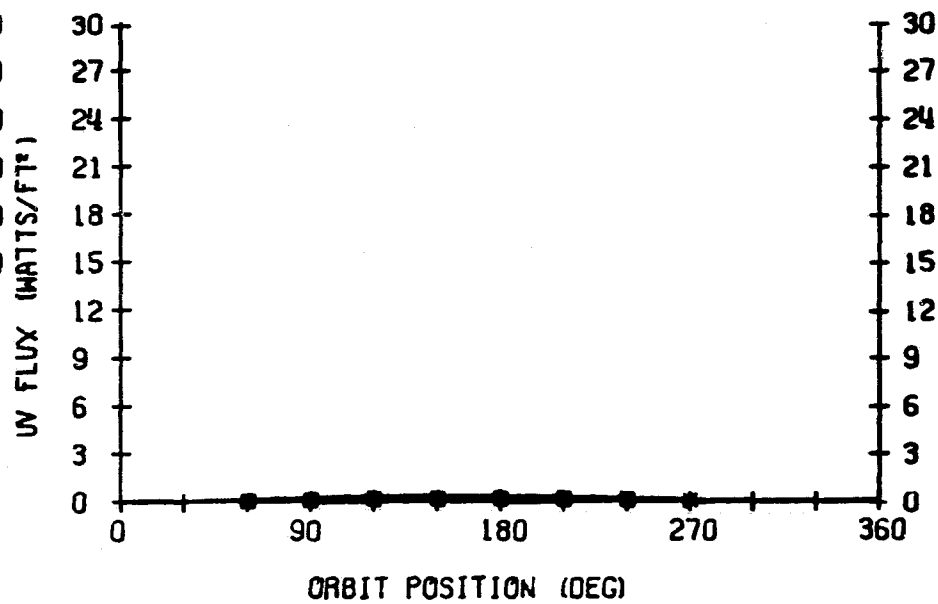
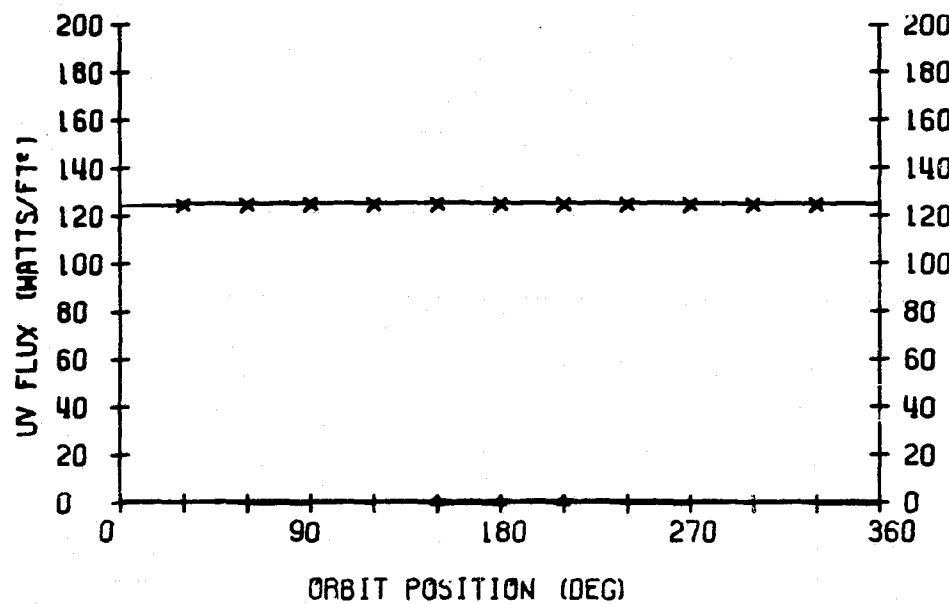
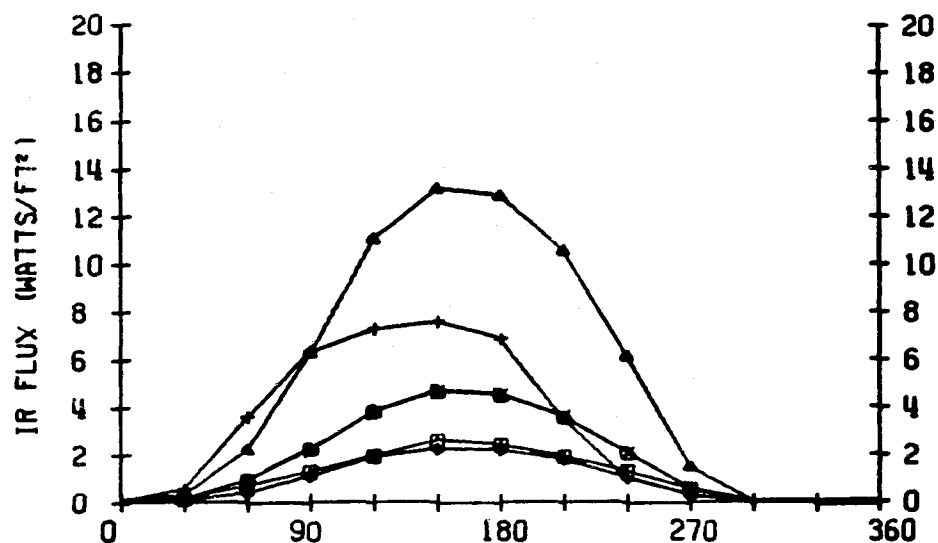


250 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	4.4	3.9	3.2	5.6	5.9	7.3
R	+Y (○)	4.3	3.6	2.5	6.0	3.1	6.4
F	+Z (△)	0.1	0.1	0.1	1.2	0.7	2.7
L	-X (+)	4.2	3.8	3.3	5.2	3.0	5.3
U	-Y (X)	4.5	3.6	2.6	6.0	3.2	6.5
X	-Z (◇)	7.1	7.2	6.7	7.6	7.2	7.6

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

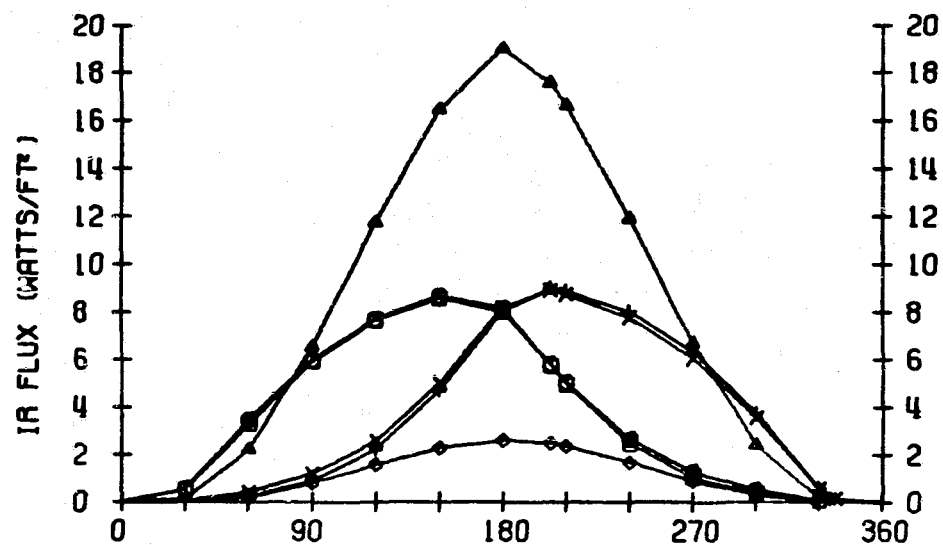
FOR

250 KM * BETA=-45 DFG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

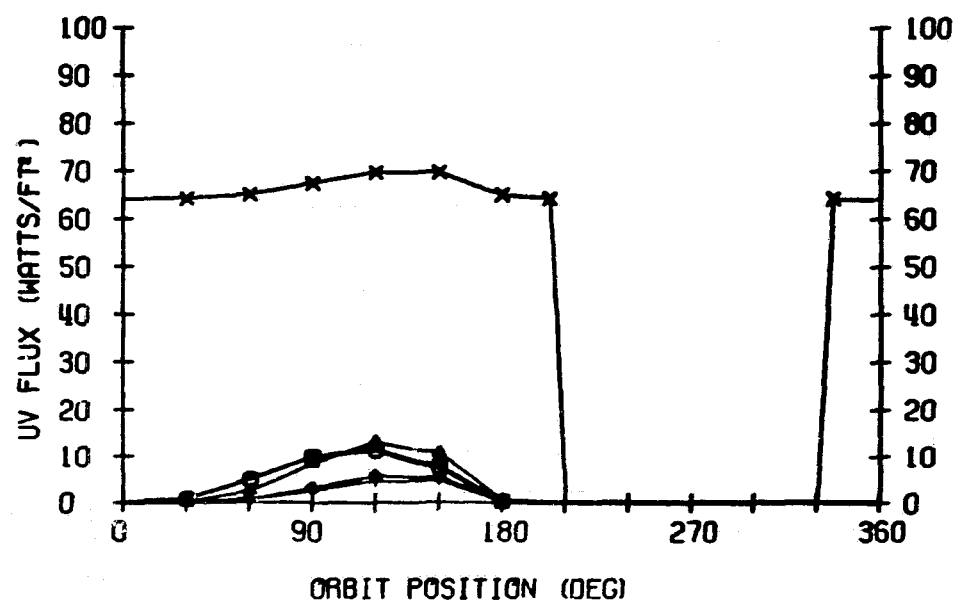
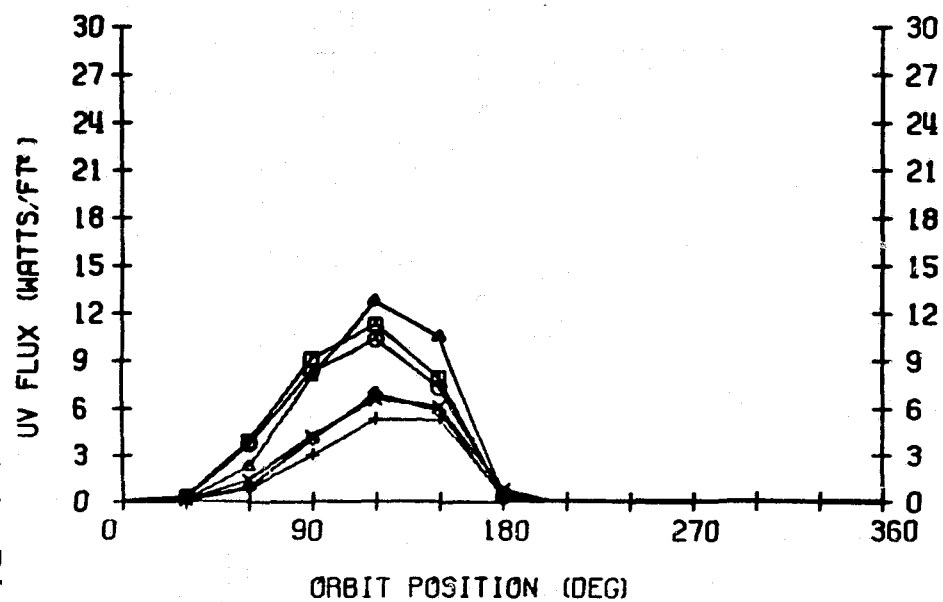
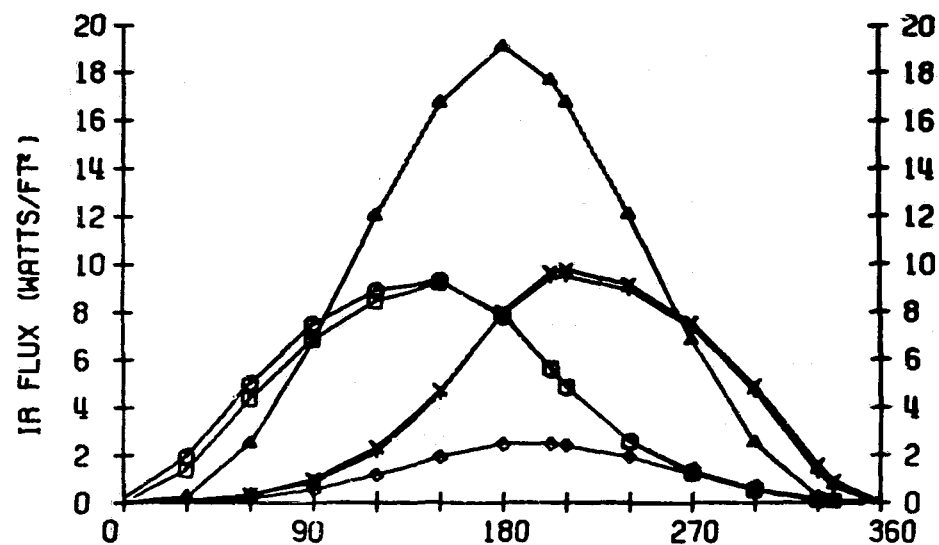
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.6	3.9	4.3	2.7	2.2	1.1
R	+Y (○)	3.7	4.1	5.1	2.4	4.5	1.9
F	+Z (Δ)	7.8	7.9	7.9	6.7	7.3	5.3
L	-X (+)	3.6	4.0	4.5	3.0	4.6	3.0
U	-Y (x)	3.7	4.1	5.0	2.4	4.9	1.9
X	-Z (◇)	1.1	1.0	1.2	1.2	1.0	0.9
U	+X (□)	2.7	2.9	3.2	2.3	1.3	1.0
V	+Y (○)	2.5	2.8	3.6	1.8	2.9	1.2
F	+Z (Δ)	2.8	2.9	2.9	2.6	2.4	1.7
L	-X (+)	1.3	1.1	1.2	1.4	1.1	1.1
U	-Y (x)	1.6	41.4	79.0	1.8	78.6	1.2
X	-Z (◇)	1.5	1.3	1.5	1.7	1.1	1.1

250 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

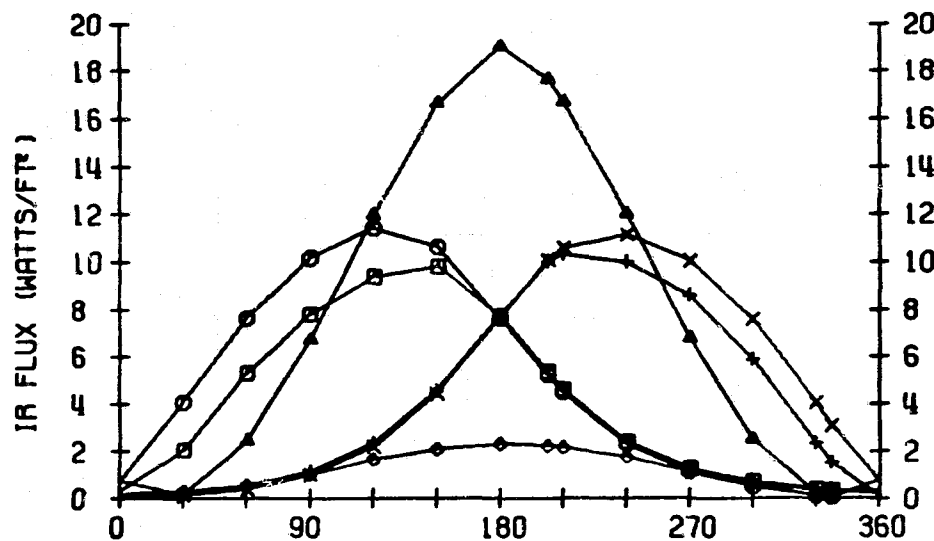


LOCATION 2

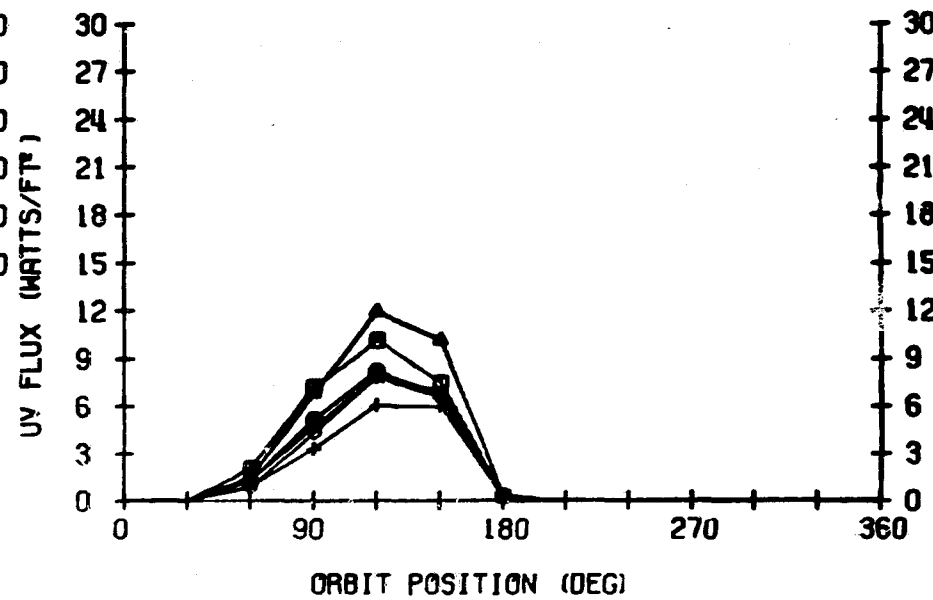
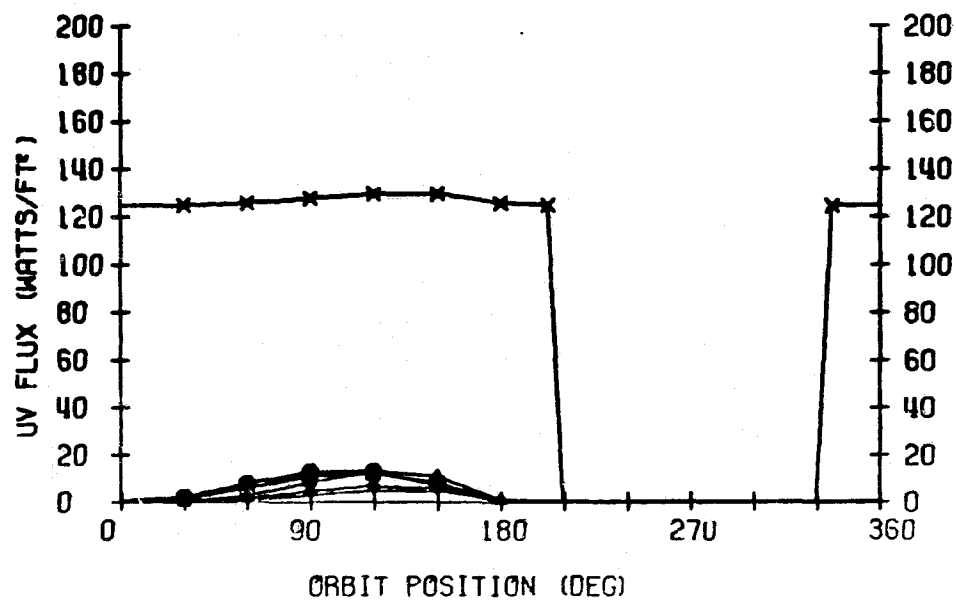
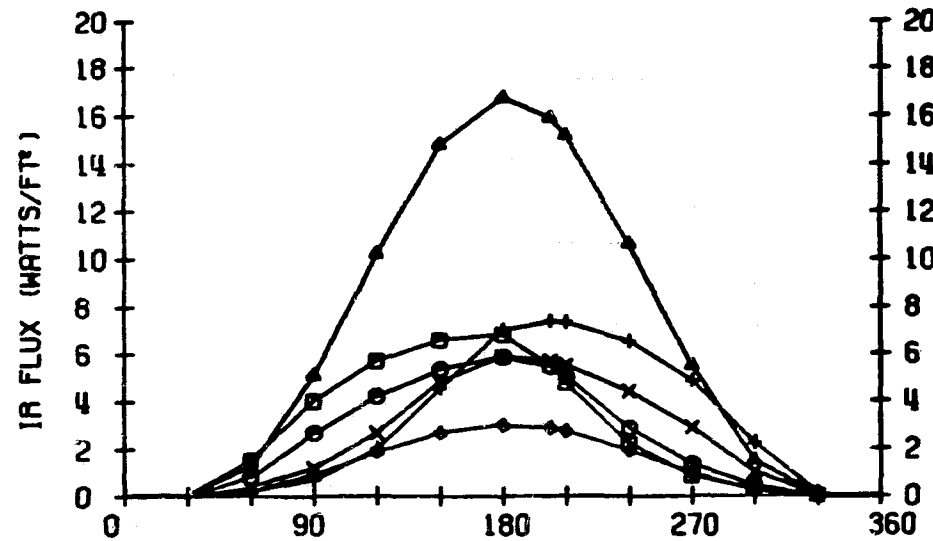


250 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

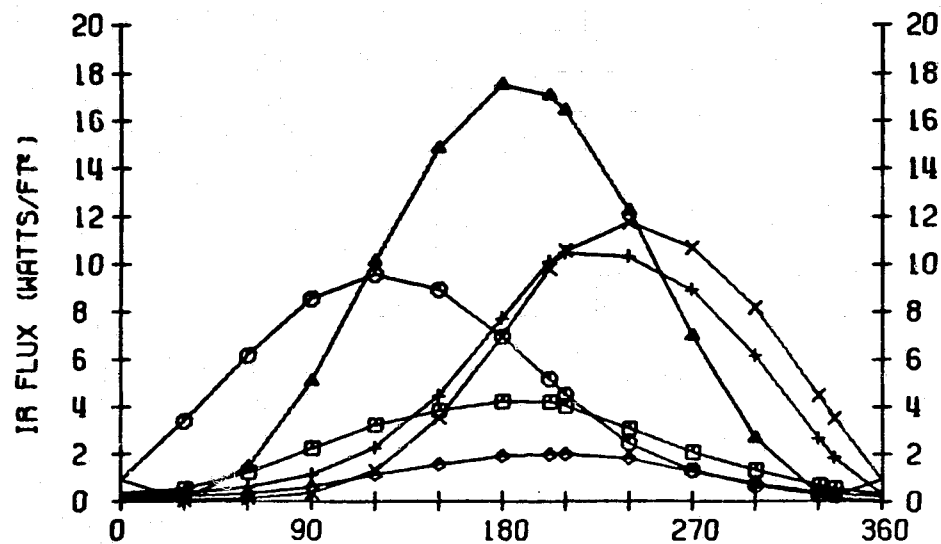


LOCATION 4

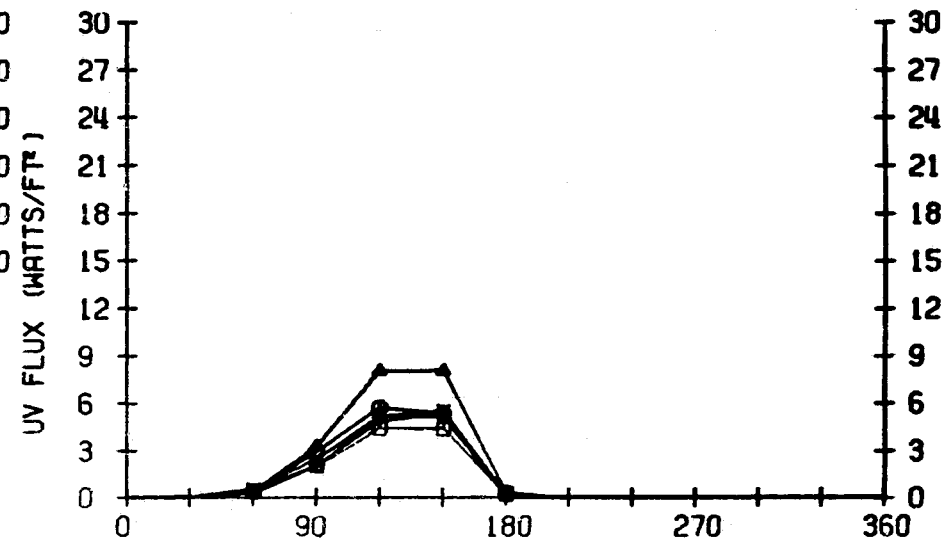
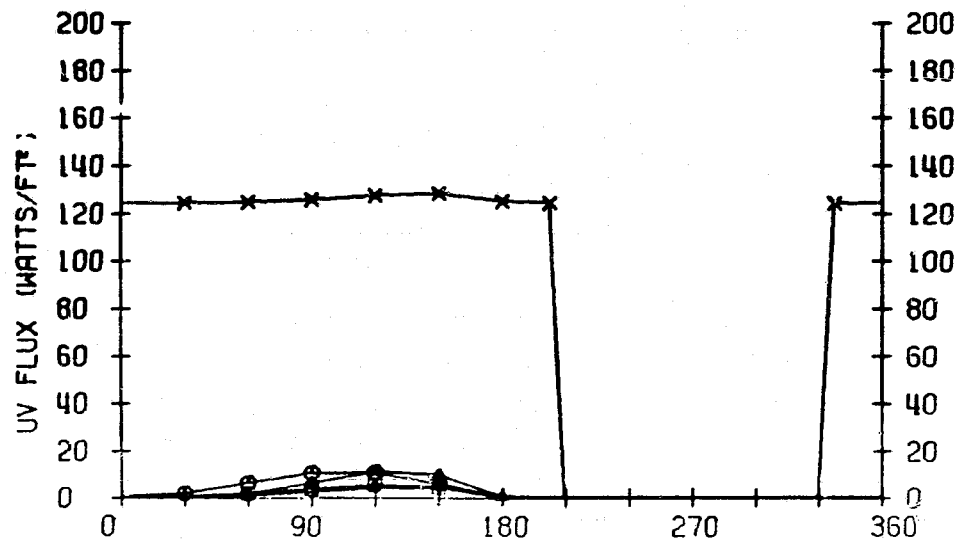
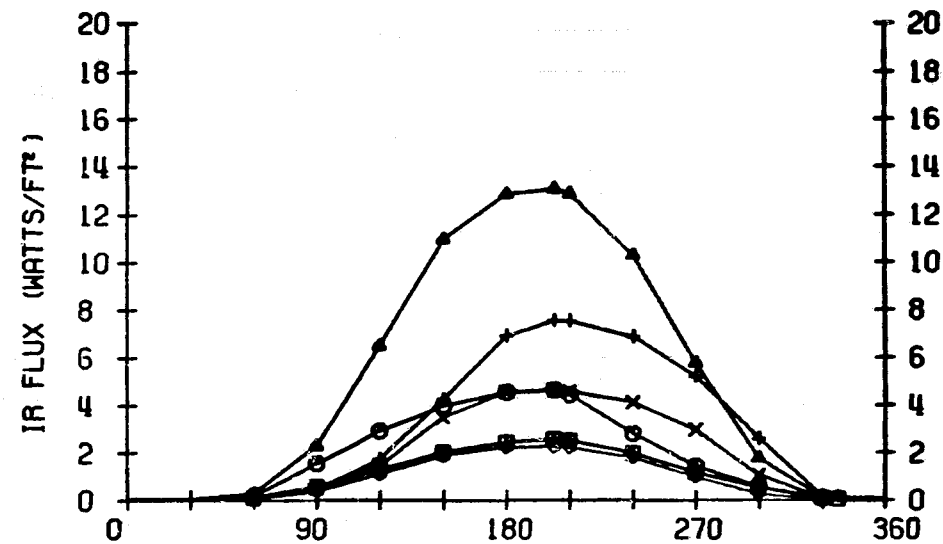


250 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	5.0	4.4	3.5	6.3	6.2	7.8
R	+Y (○)	5.0	4.2	2.8	6.8	3.4	7.0
F	+Z (△)	0.1	0.1	0.1	1.4	0.8	2.9
L	-X (+)	5.0	4.5	3.9	6.1	3.4	5.9
U	-Y (X)	5.2	4.1	3.1	7.0	3.5	7.1
X	-Z (◇)	8.1	8.3	7.8	8.6	7.9	8.4

FLUX DATA
FOR
ALTITUDE - 250 km
ORIENTATION NO. 6

Bottom to sun, tail facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

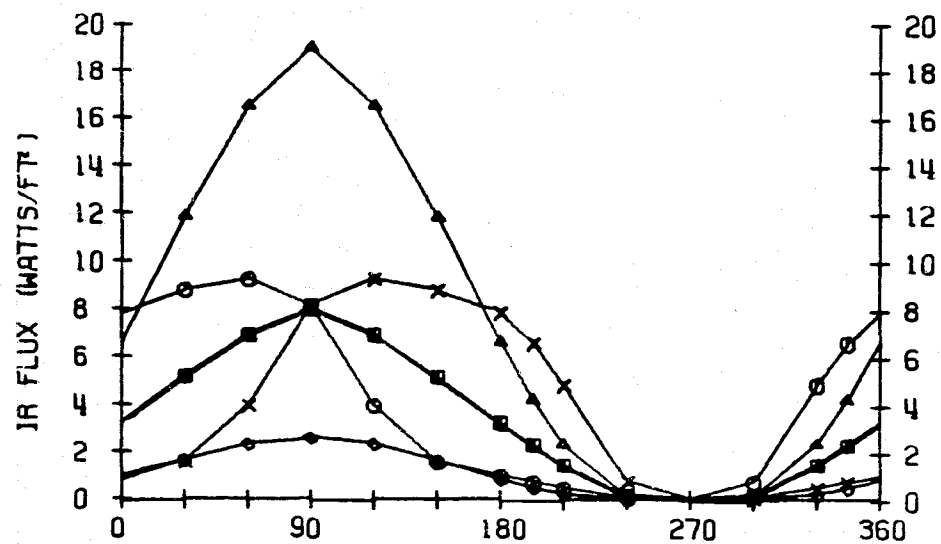
FOR

250 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

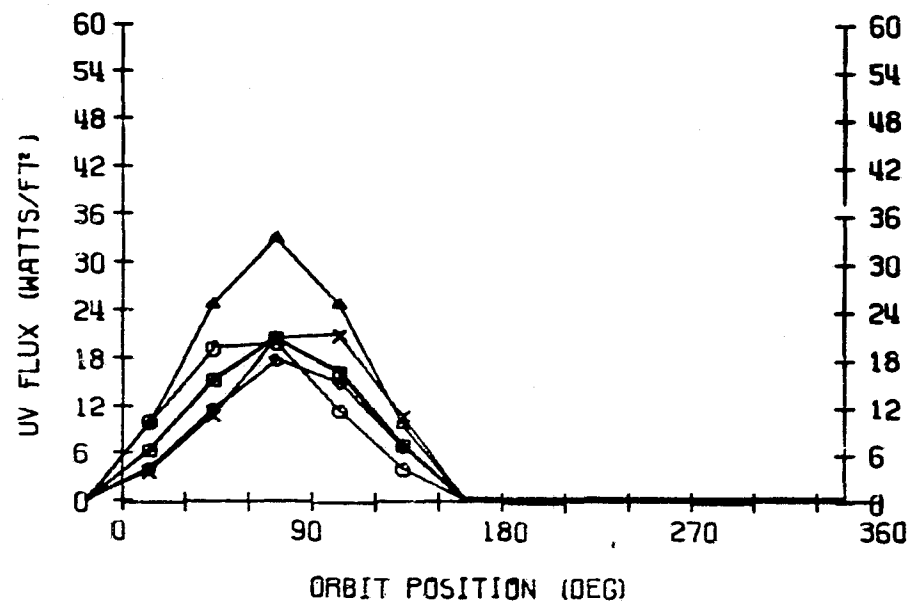
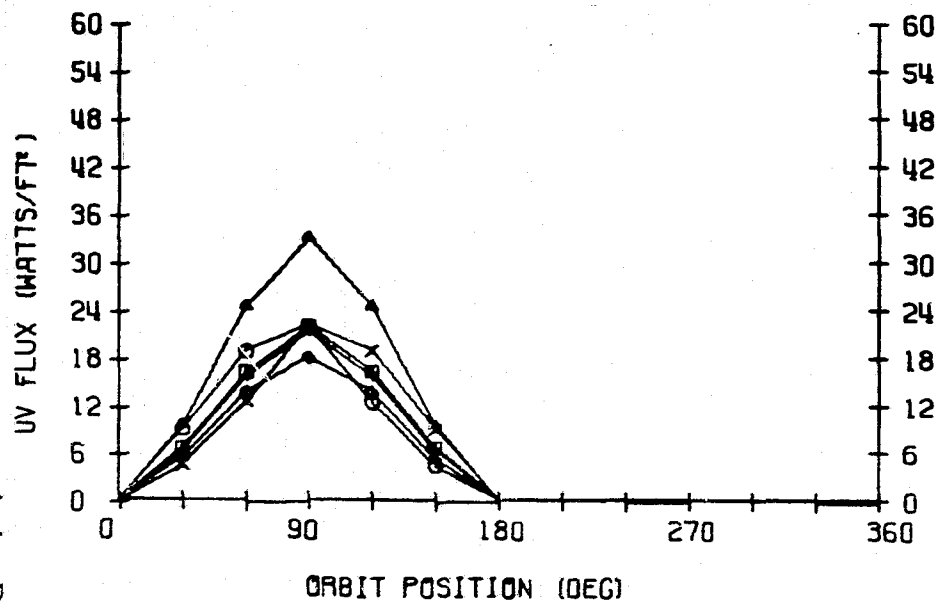
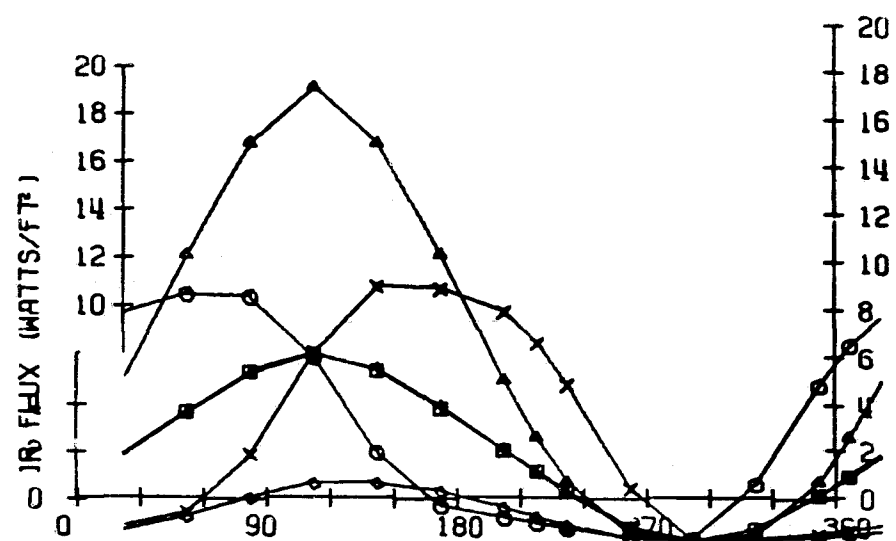
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.5	3.9	4.4	2.6	2.3	1.0
R	+Y (○)	3.9	4.5	5.6	2.4	5.2	1.9
F	+Z (Δ)	7.8	8.0	8.0	6.7	7.4	5.2
L	-X (+)	3.5	3.9	4.3	2.8	4.5	2.7
U	-Y (x)	3.9	4.5	5.6	2.4	5.2	1.9
X	-Z (◇)	1.0	1.0	1.2	1.2	1.0	0.9
U	+X (□)	5.7	5.5	5.3	5.7	4.3	4.1
V	+Y (○)	5.6	5.4	5.4	5.5	5.1	4.7
F	+Z (Δ)	8.4	8.5	8.5	8.0	8.1	6.9
L	-X (+)	5.5	5.5	5.5	5.6	5.4	5.4
U	-Y (x)	5.6	5.5	5.4	5.5	5.1	4.7
X	-Z (◇)	4.7	4.5	4.4	5.3	4.0	4.4

250 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

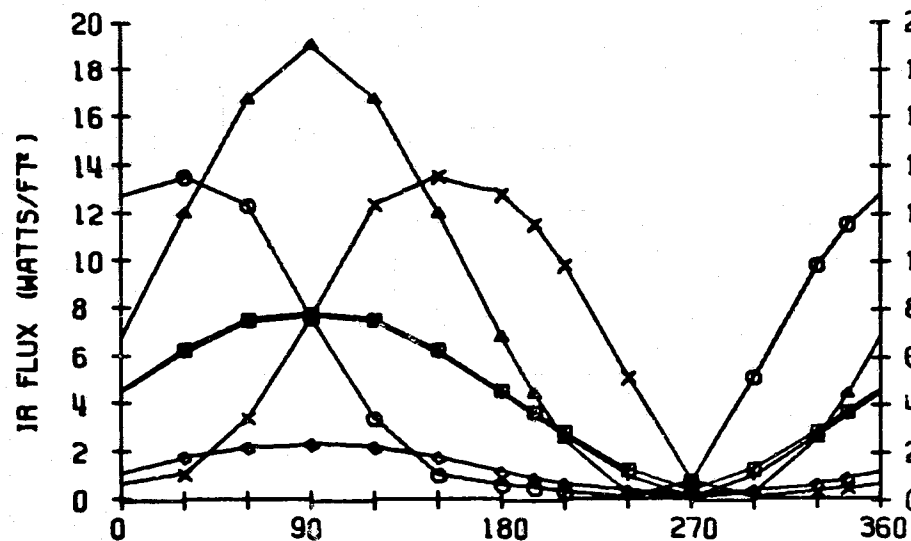


LOCATION 2

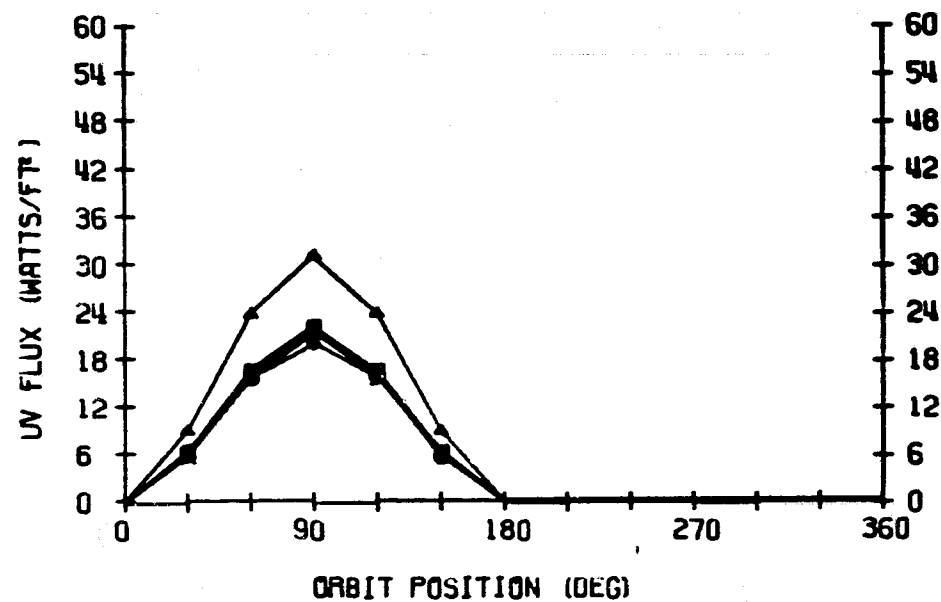
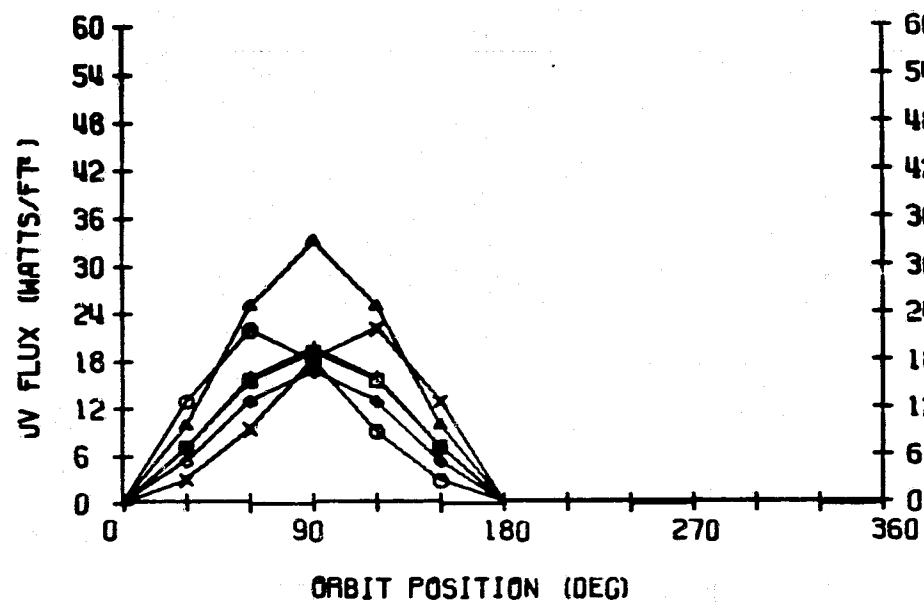
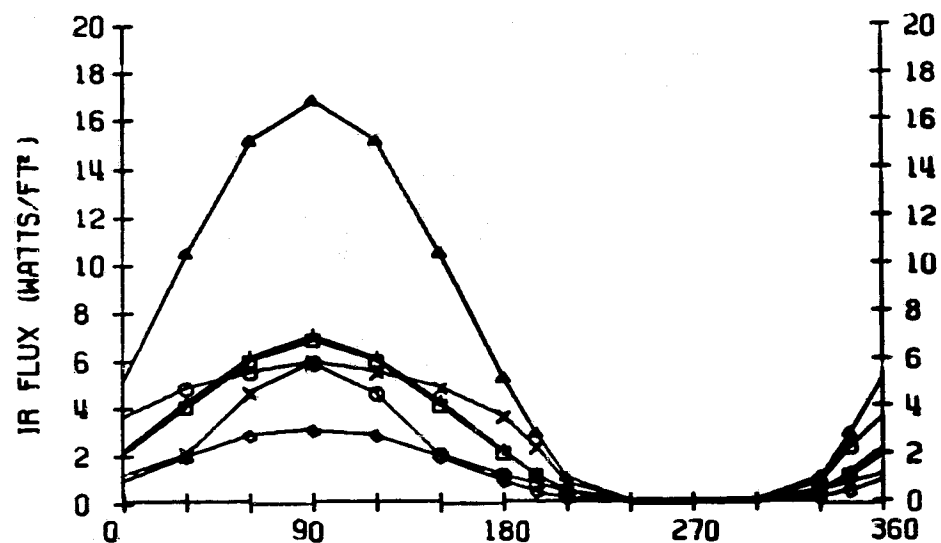


250 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

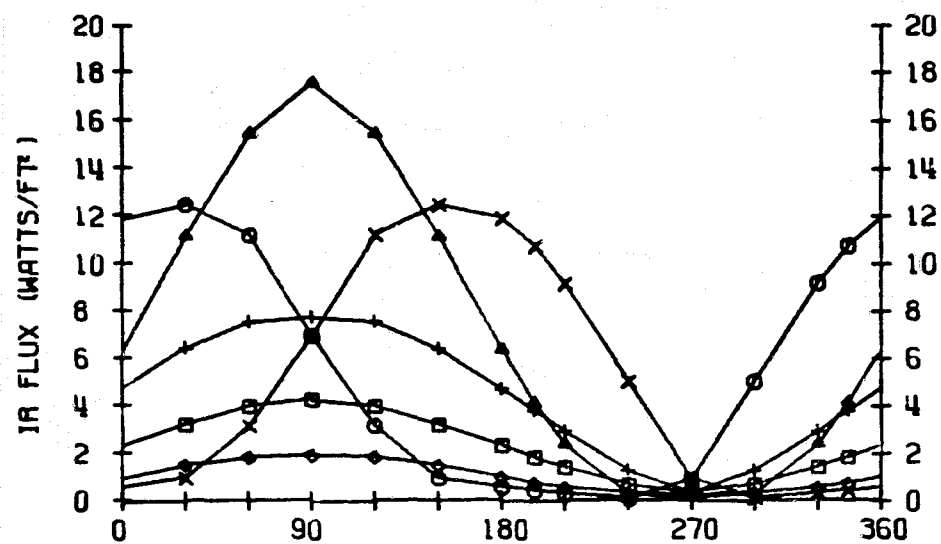


LOCATION 4

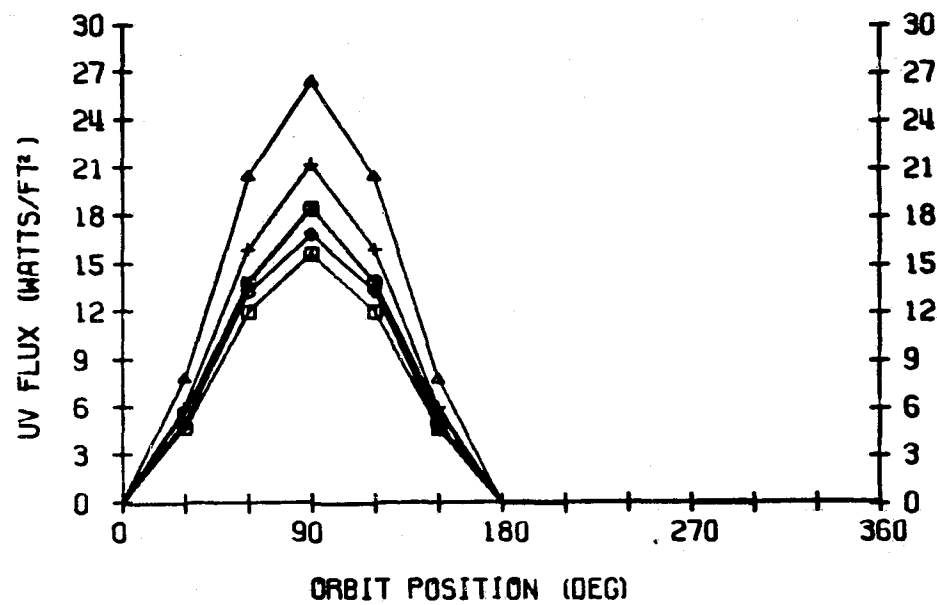
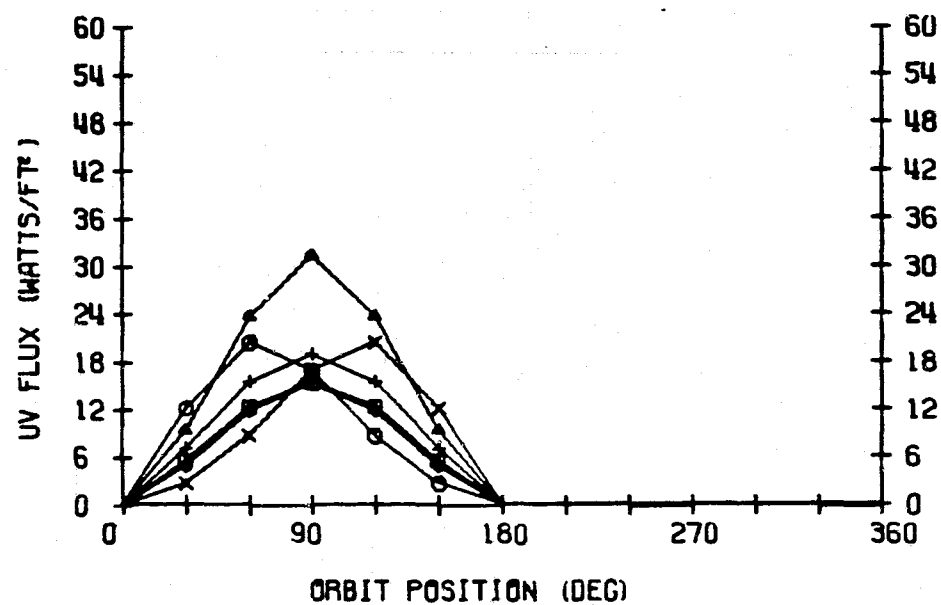
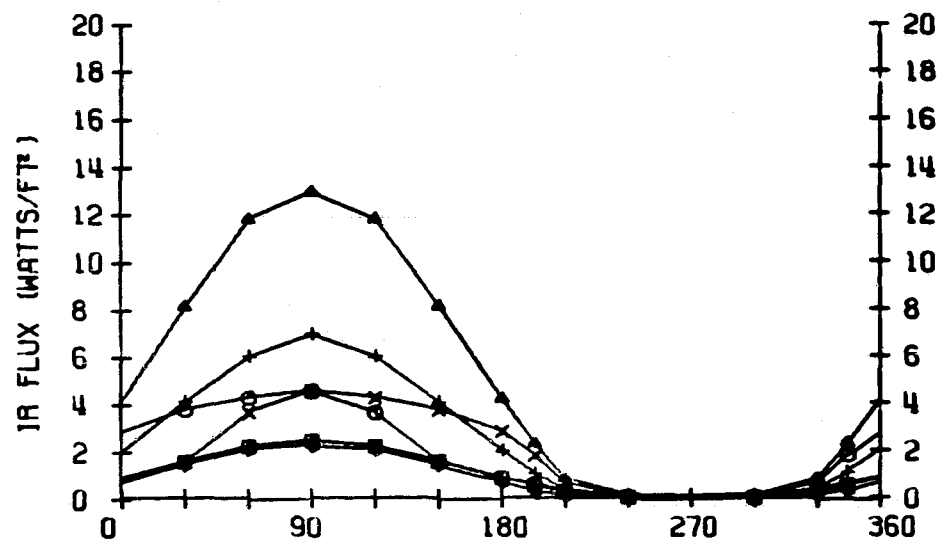


250 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	6.5	5.9	4.7	8.2	8.1	10.4
R	+Y (○)	6.6	5.6	3.7	9.0	4.6	9.5
F	+Z (Δ)	0.2	0.1	0.1	1.8	1.0	3.9
L	-X (+)	6.4	5.9	5.0	7.9	4.5	7.9
U	-Y (×)	6.6	5.3	3.9	8.9	4.6	9.5
X	-Z (◇)	10.5	11.0	10.1	11.2	10.6	11.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

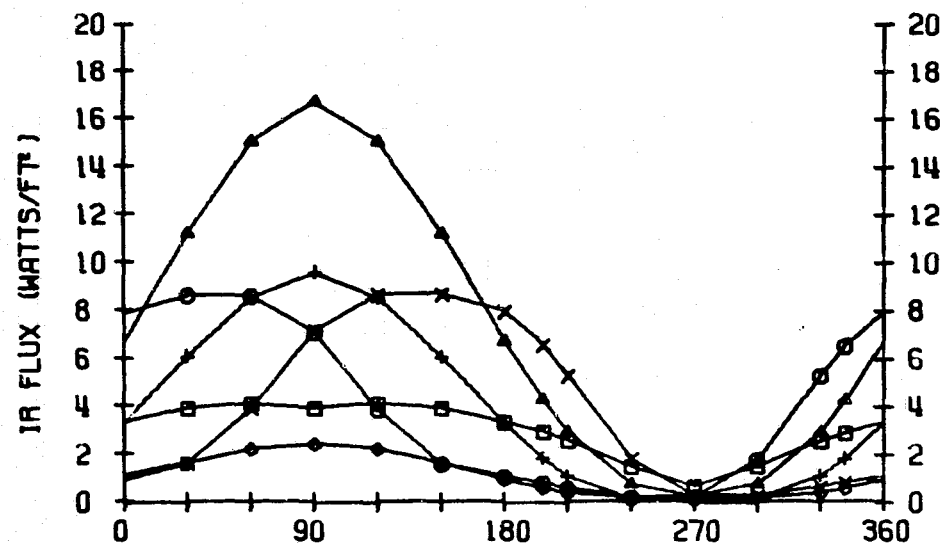
FOR

250 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

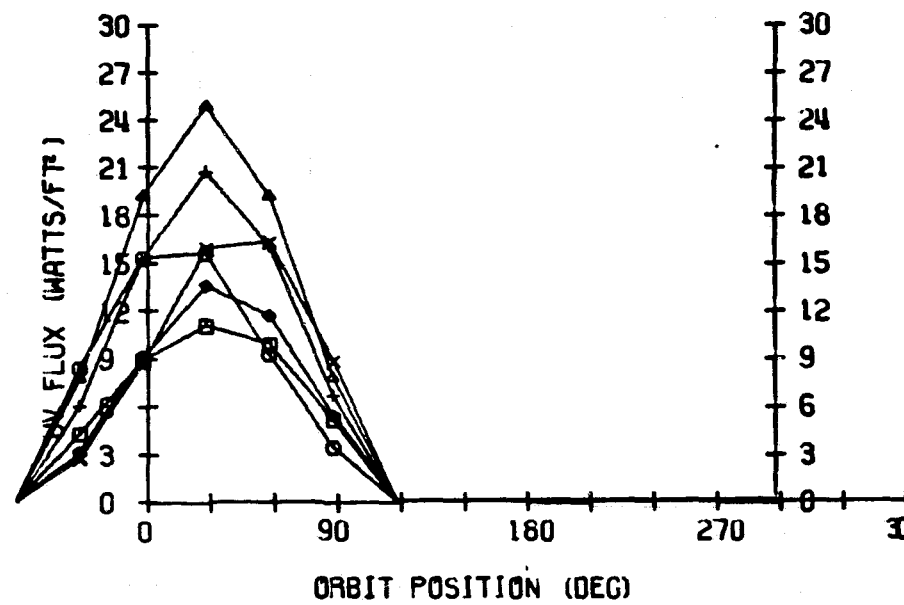
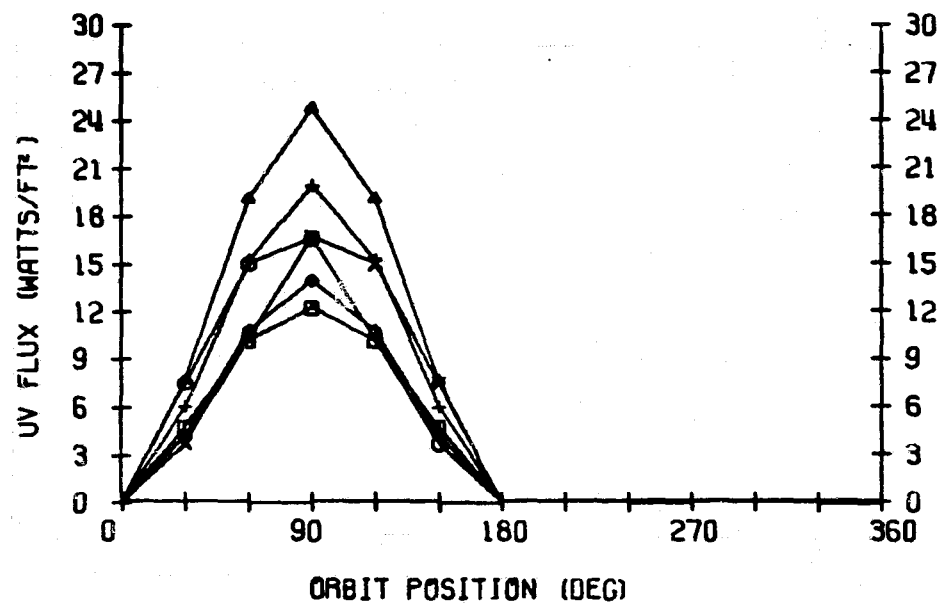
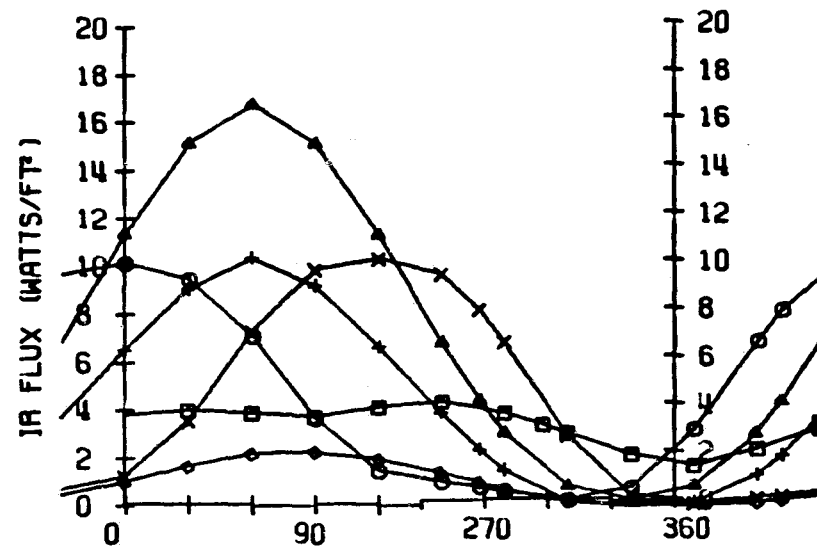
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.9	3.3	3.9	2.0	2.3	1.1
R	+Y (○)	3.8	4.5	5.6	2.3	5.3	1.9
F	+Z (Δ)	7.4	7.6	7.6	6.3	7.3	5.4
L	-X (+)	3.9	4.4	5.0	3.0	5.2	3.1
U	-Y (X)	3.9	4.4	5.6	2.3	5.3	1.9
X	-Z (◇)	1.0	1.0	1.2	1.1	1.1	0.9
U	+X (□)	3.5	3.2	3.0	3.8	4.0	3.8
V	+Y (○)	4.4	4.3	4.4	4.3	4.6	4.3
F	+Z (Δ)	6.5	6.5	6.5	6.2	6.8	6.2
L	-X (+)	5.2	5.4	5.8	4.9	5.9	5.2
U	-Y (X)	4.4	4.4	4.4	4.3	4.6	4.3
X	-Z (◇)	3.7	3.6	3.5	4.1	3.6	3.9

250 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

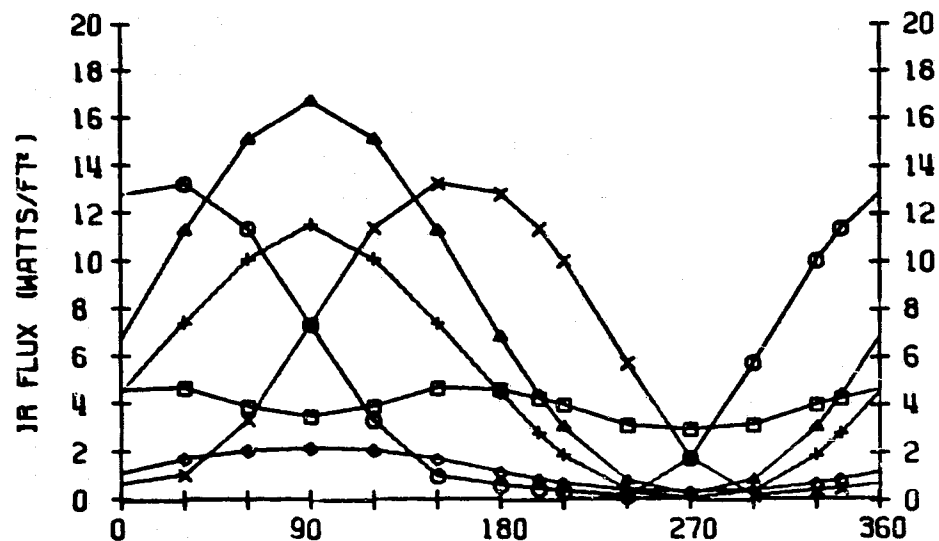


LOCATION 2

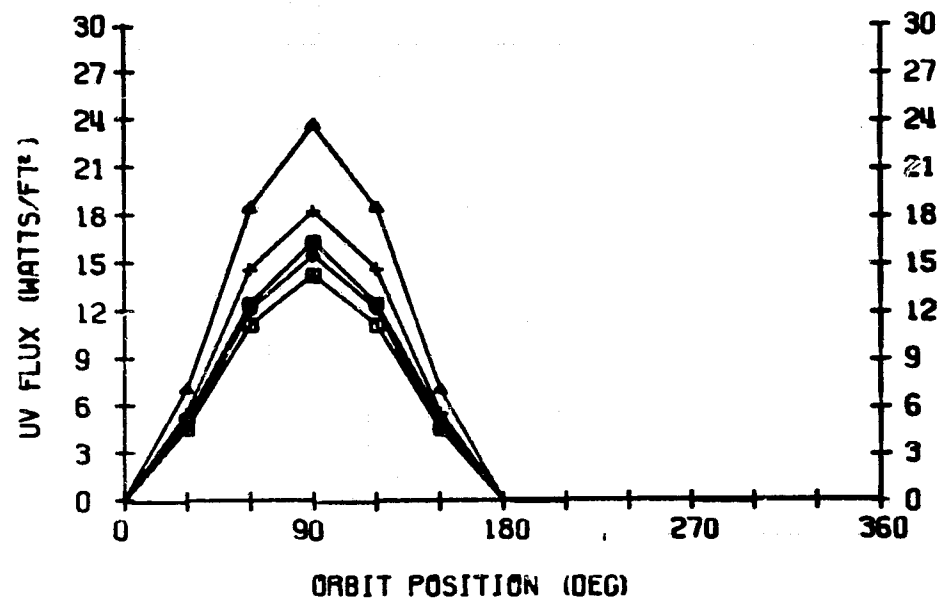
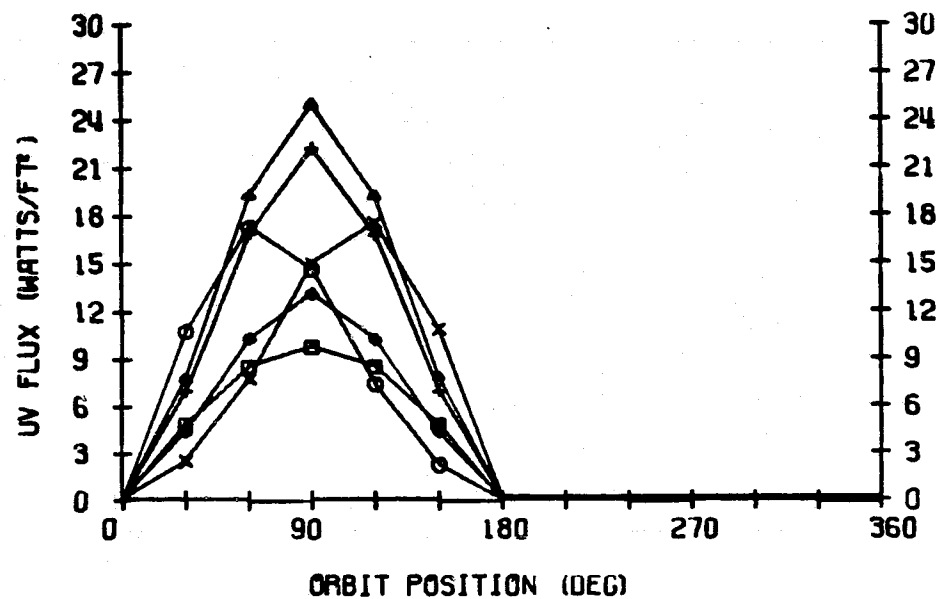
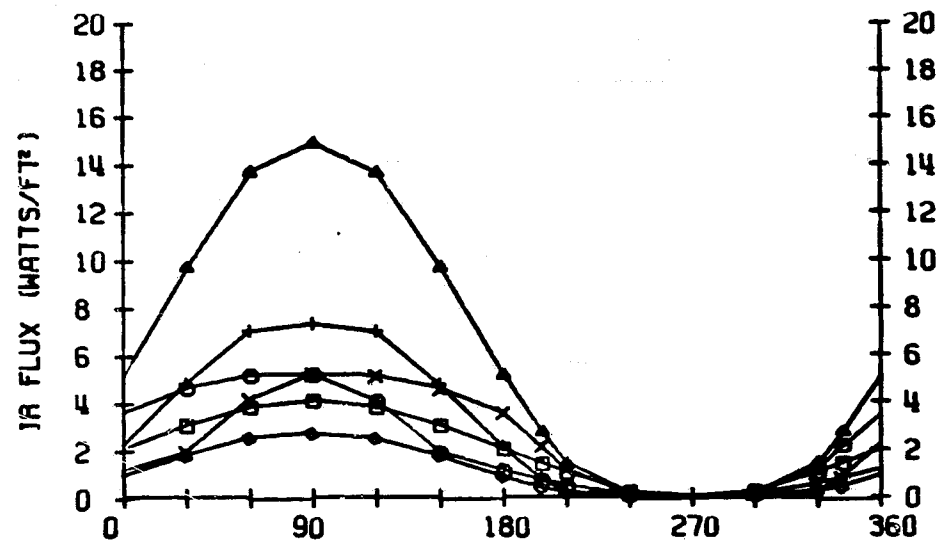


250 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

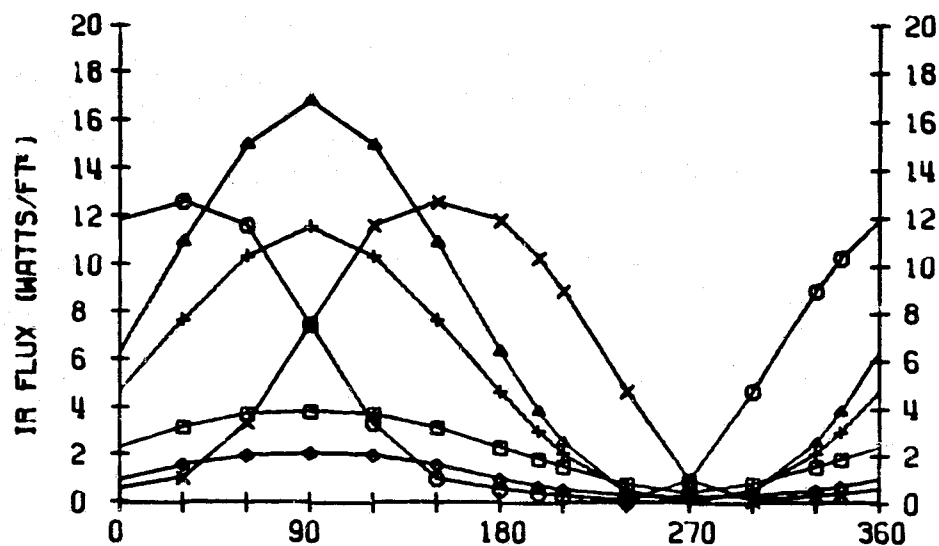


LOCATION 4

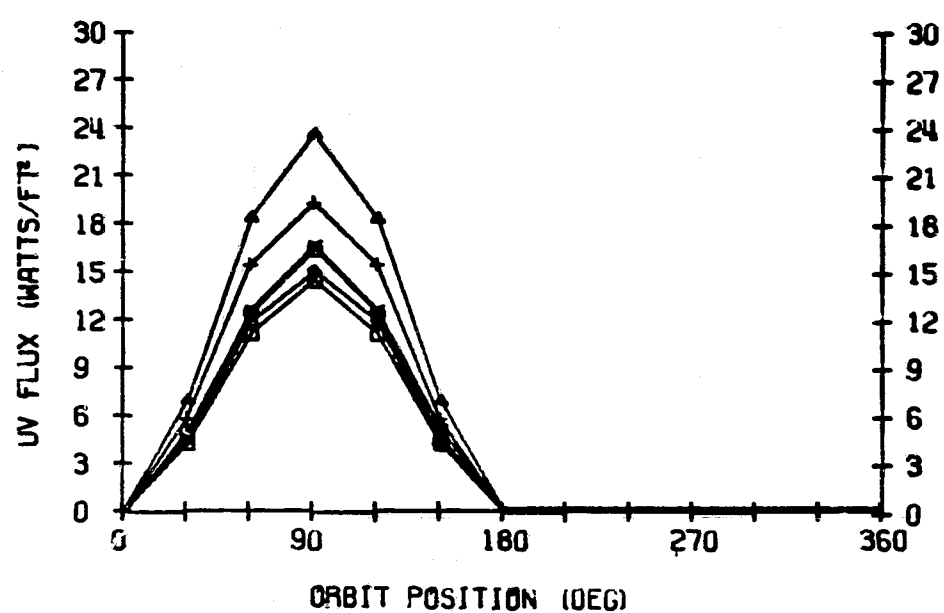
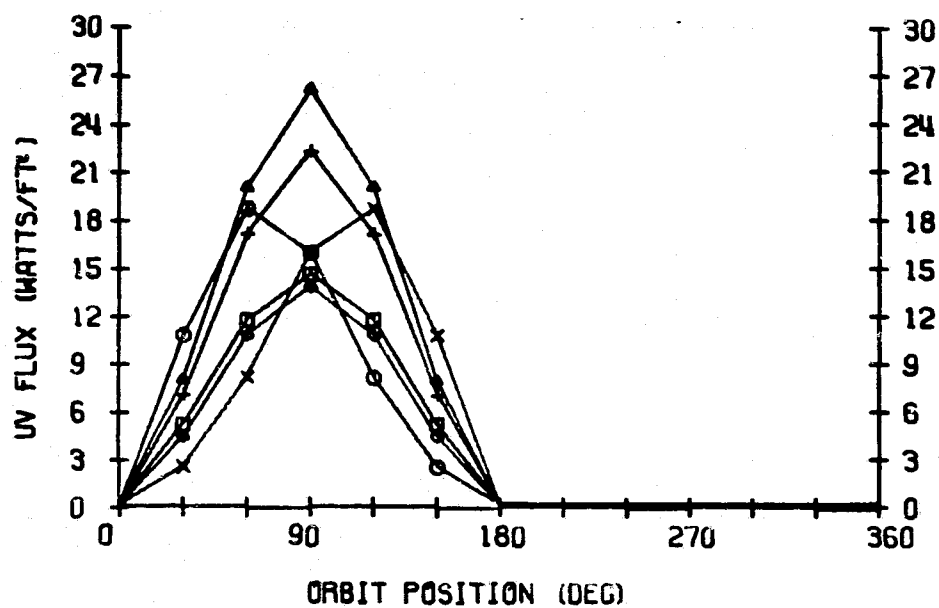
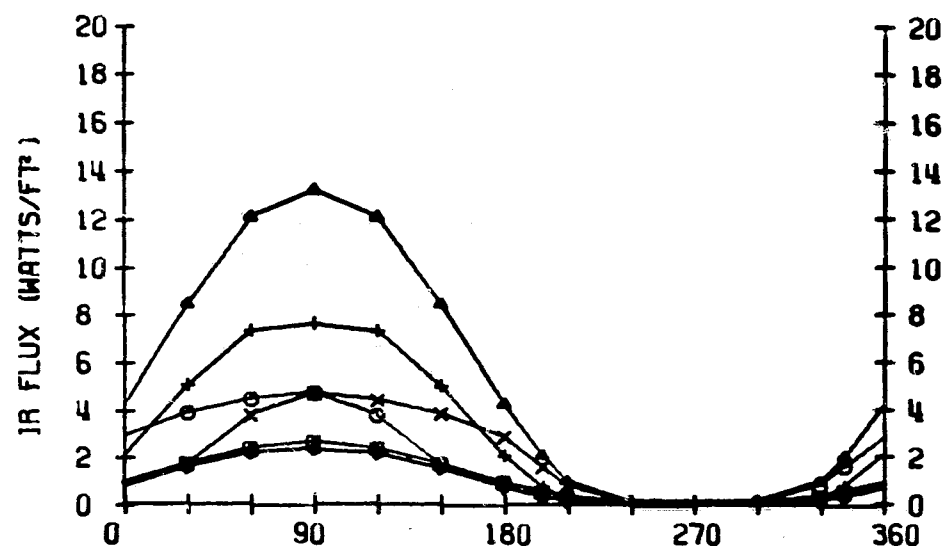


250 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE							
		LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
SURFACE DIRECTION							
I	+X (□)	6.1	5.5	4.4	7.5	8.4	10.5
R	+Y (○)	6.0	5.1	3.4	8.0	4.5	9.4
F	+Z (△)	0.1	0.1	0.1	1.7	1.0	3.9
L	-X (+)	5.6	5.1	4.4	6.9	4.2	7.6
U	-Y (X)	5.9	4.8	3.5	7.9	4.5	9.4
X	-Z (◇)	9.3	9.9	9.1	9.9	10.4	11.2

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

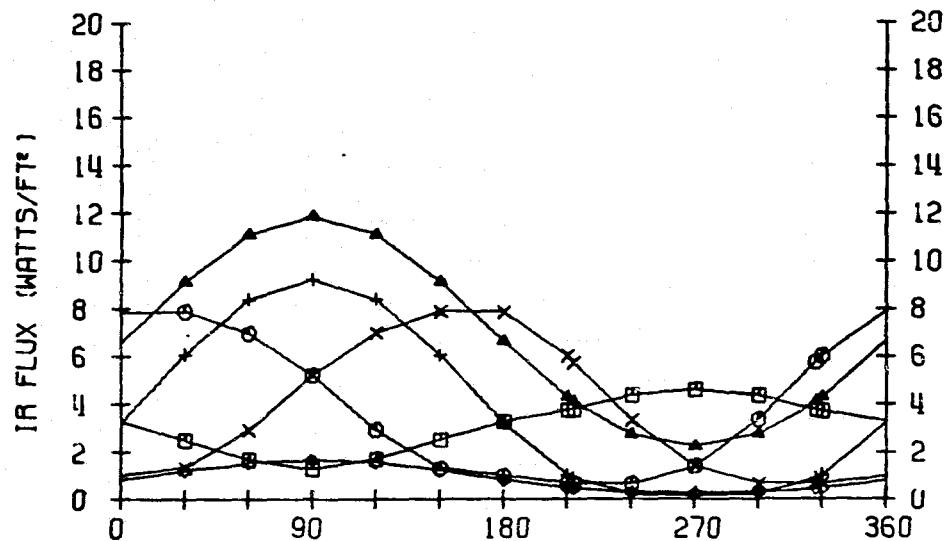
FOR

250 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

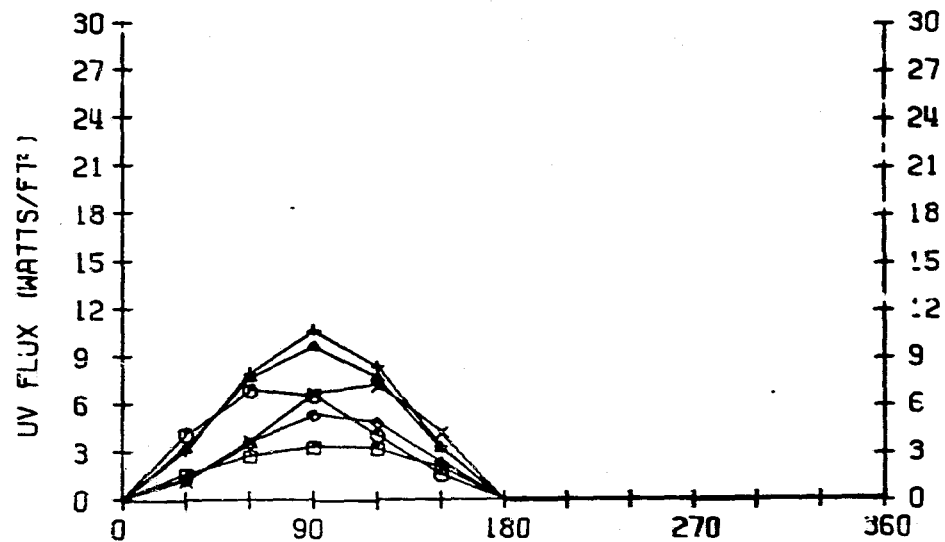
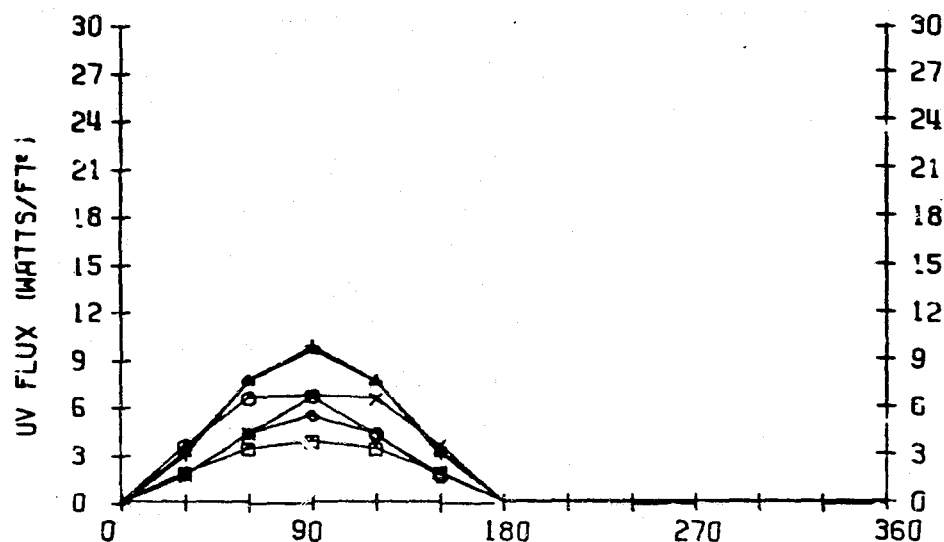
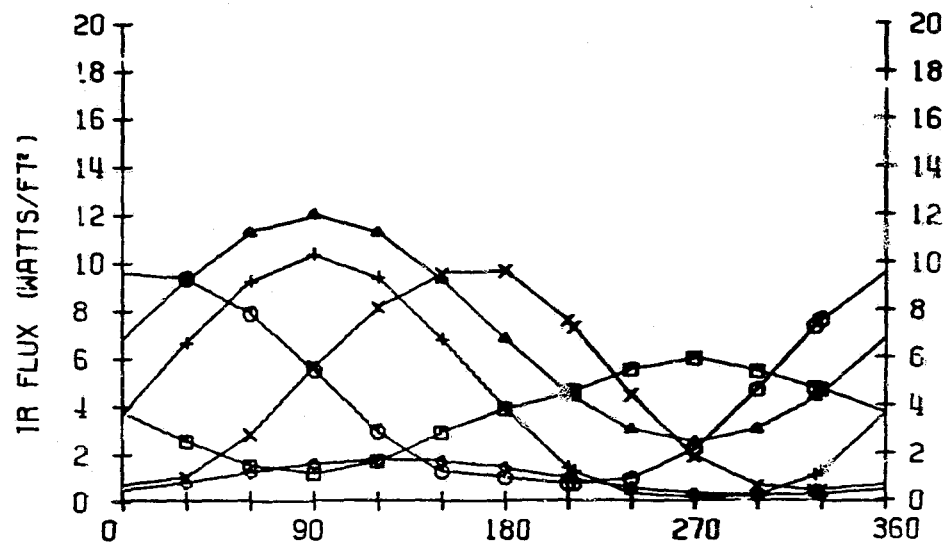
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.6	4.2	2.0	2.0	1.0
R	+Y (○)	3.8	4.5	5.6	2.1	5.2	1.8
F	+Z (Δ)	6.8	7.0	7.0	5.6	6.5	4.8
L	-X (+)	4.0	4.5	5.2	3.0	5.3	3.1
U	-Y (×)	3.8	4.4	5.6	2.1	5.2	1.8
X	-Z (◇)	0.9	0.9	1.1	1.0	1.0	0.8
U	+X (□)	1.2	1.1	1.0	1.3	1.9	1.8
V	+Y (○)	1.9	1.9	2.0	1.7	2.4	2.0
F	+Z (Δ)	2.6	2.6	2.6	2.4	2.9	2.9
L	-X (+)	2.6	2.8	3.1	2.3	3.3	2.6
U	-Y (×)	1.9	1.9	2.1	1.7	2.4	2.0
X	-Z (◇)	1.5	1.5	1.4	1.6	1.7	1.8

250 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

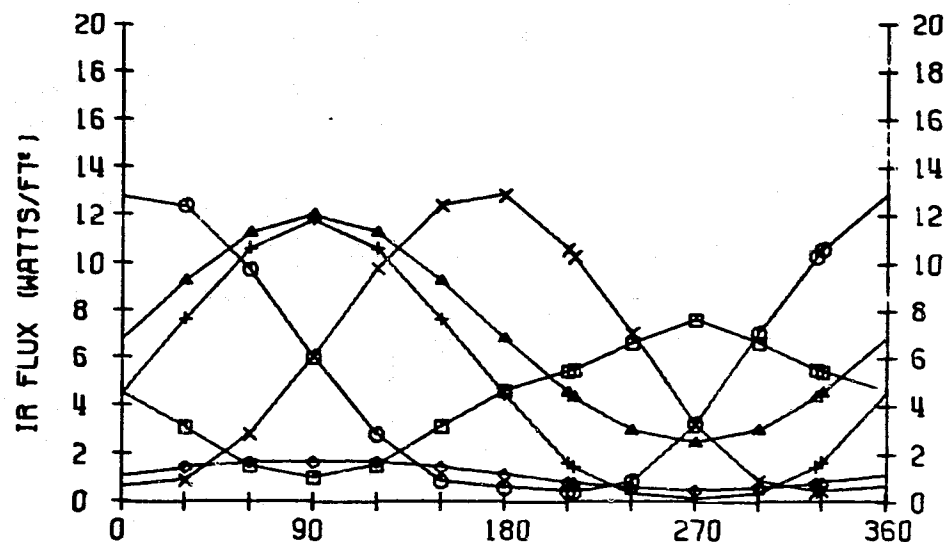


ORBIT POSITION (DEG)

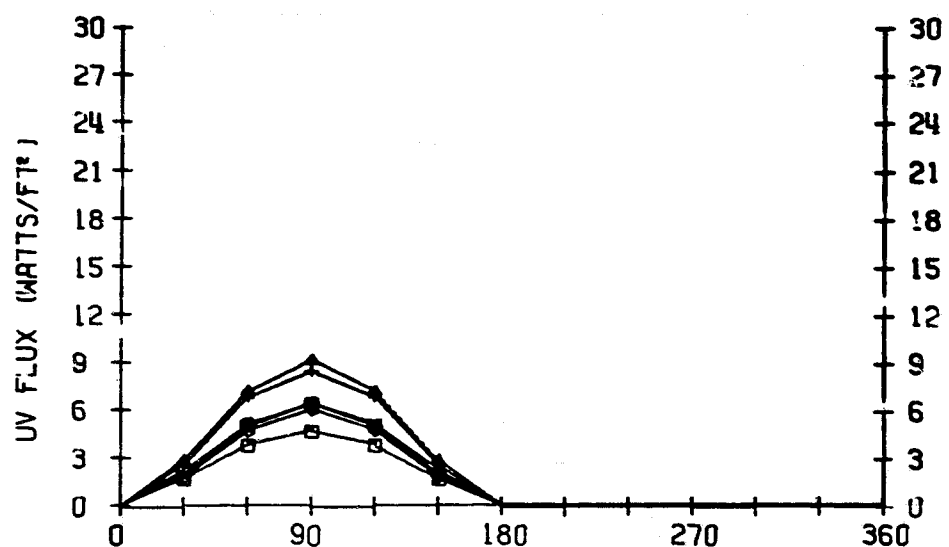
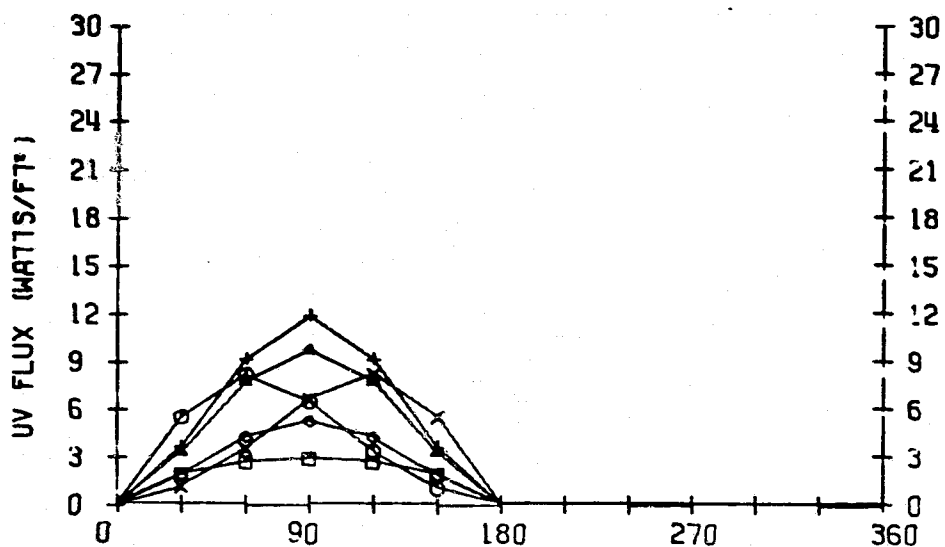
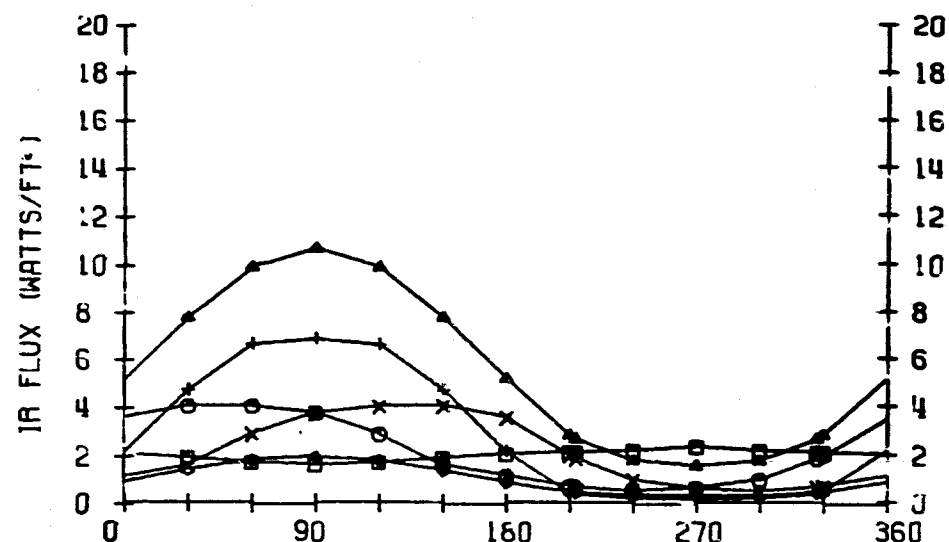
ORBIT POSITION (DEG)

250 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

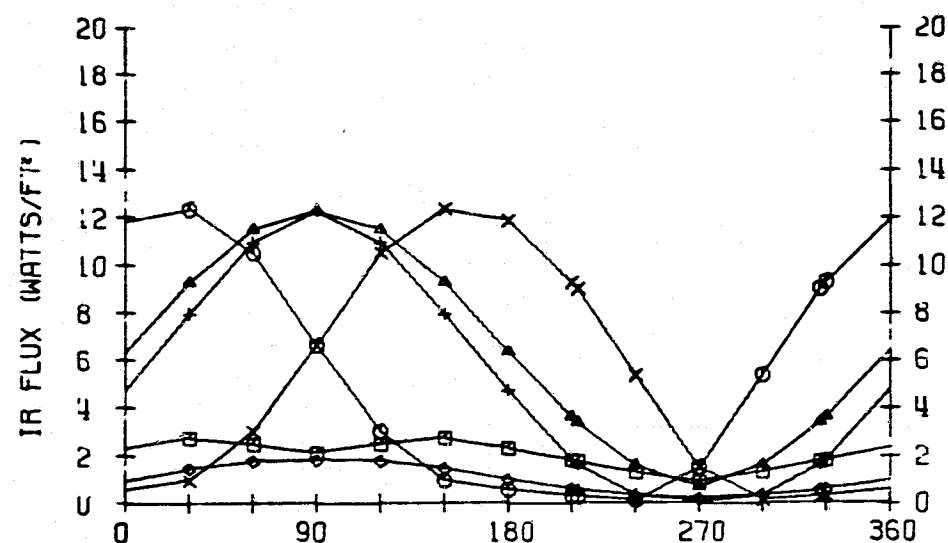


LOCATION 4

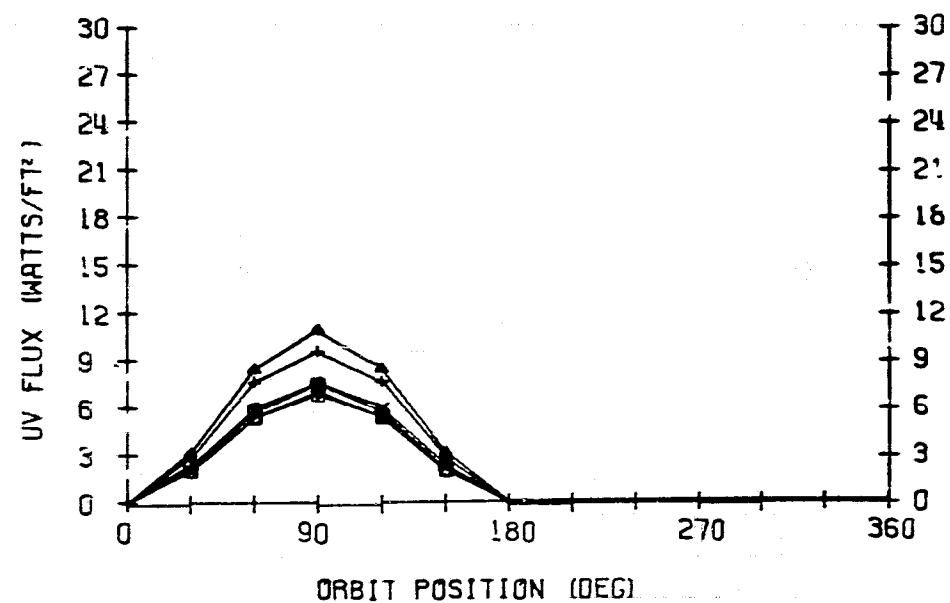
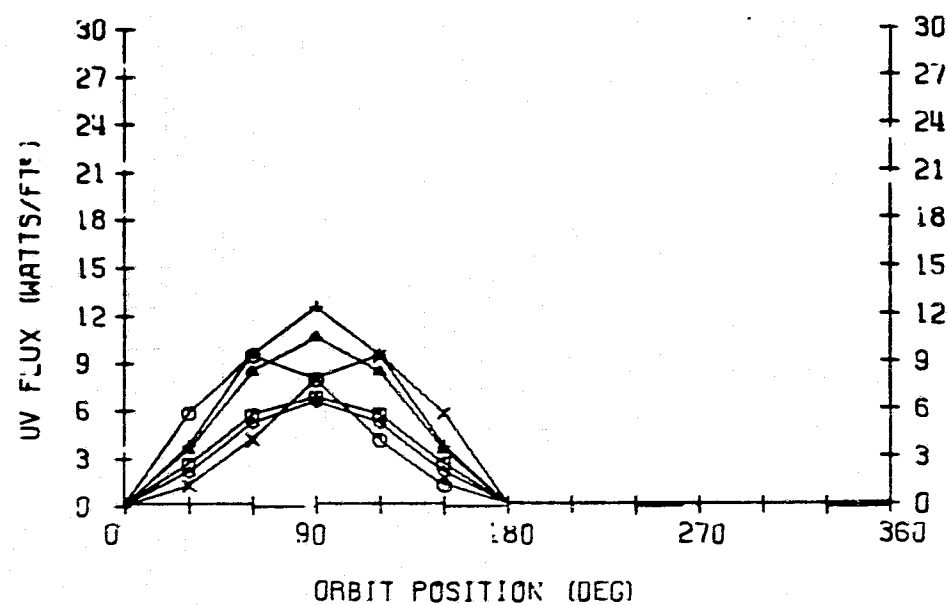
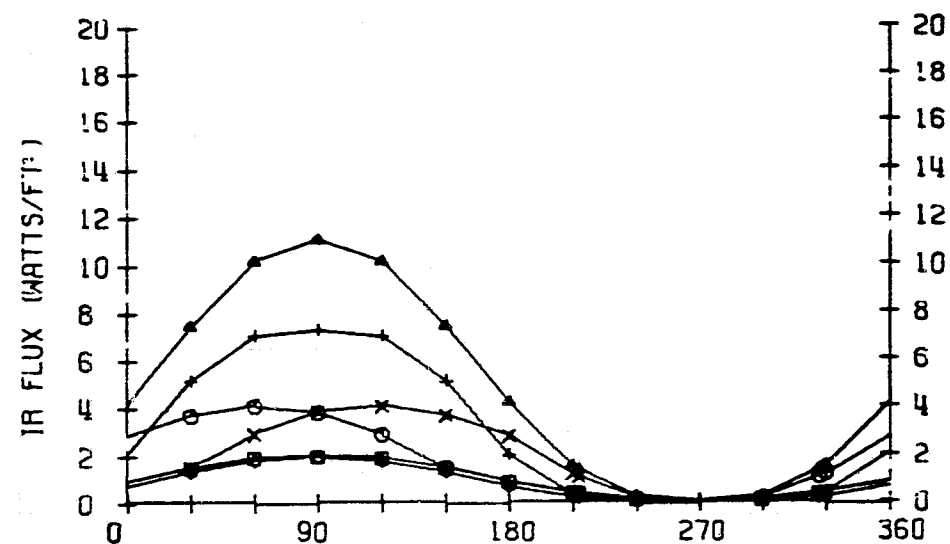


250 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	4.7	4.3	3.4	5.7	6.9	8.4
R	+Y (○)	4.6	4.0	2.6	6.1	3.6	7.4
F	+Z (△)	0.1	0.1	0.1	1.3	0.9	3.2
L	-X (+)	4.3	4.0	3.4	5.2	3.2	5.9
U	-Y (X)	4.5	3.5	2.7	6.0	3.7	7.4
X	-Z (◇)	7.0	7.6	6.9	7.3	8.2	8.7

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

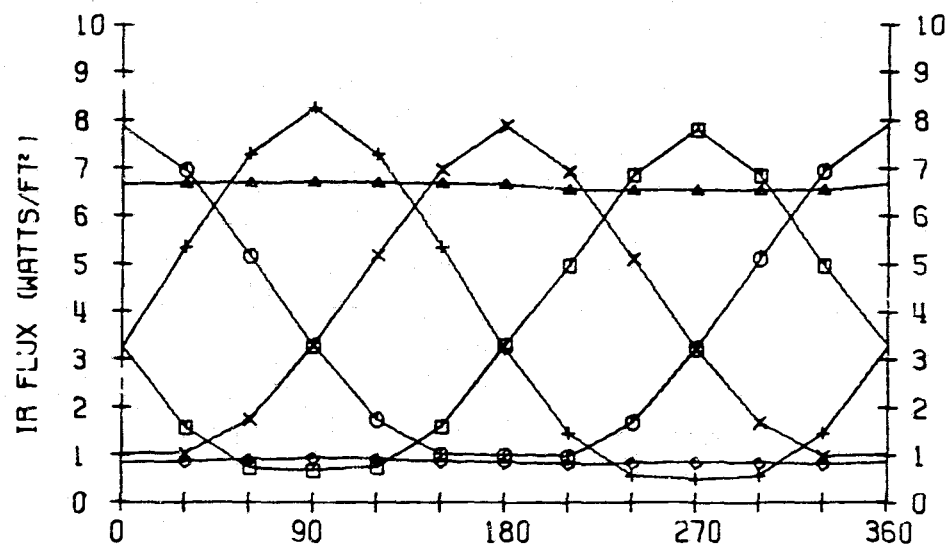
FOR

250 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

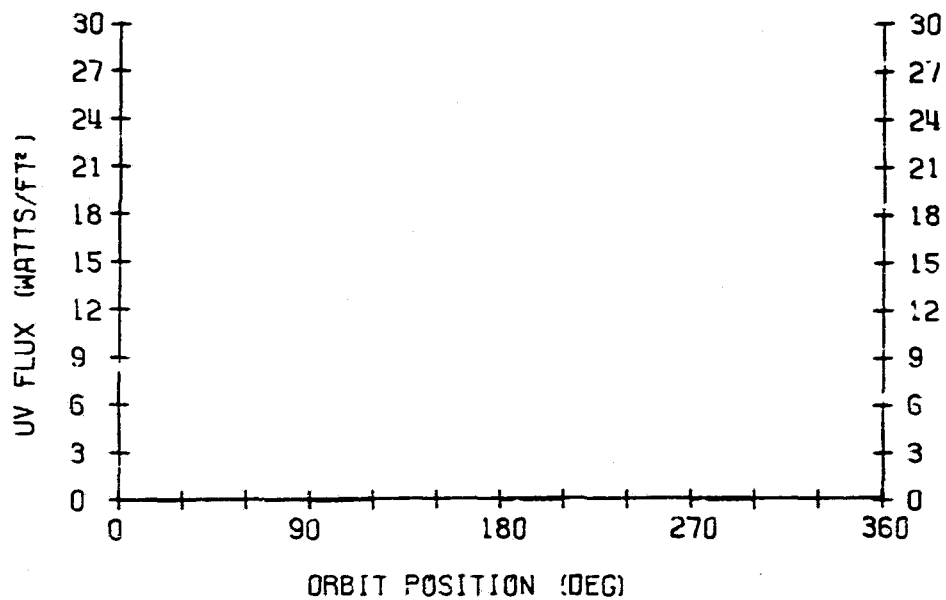
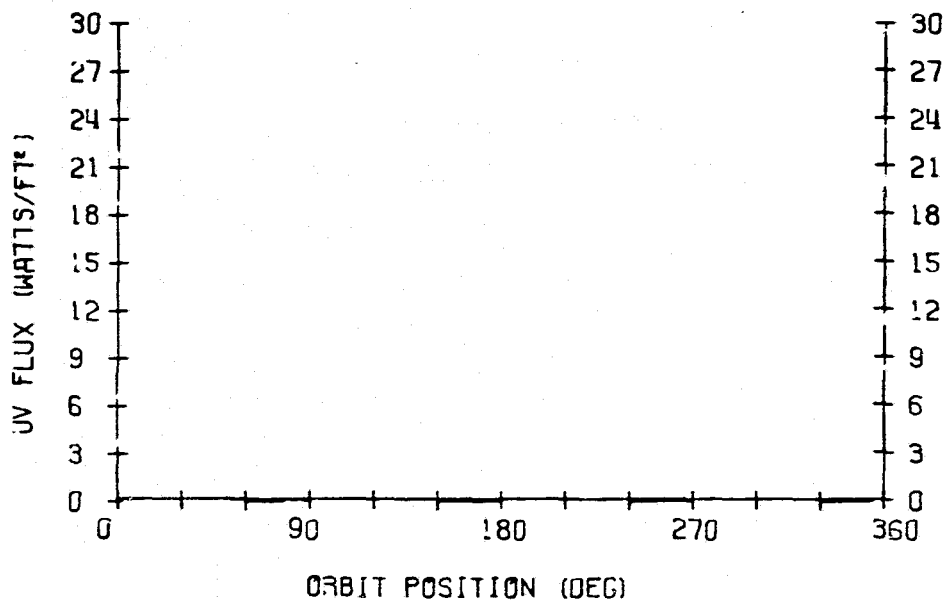
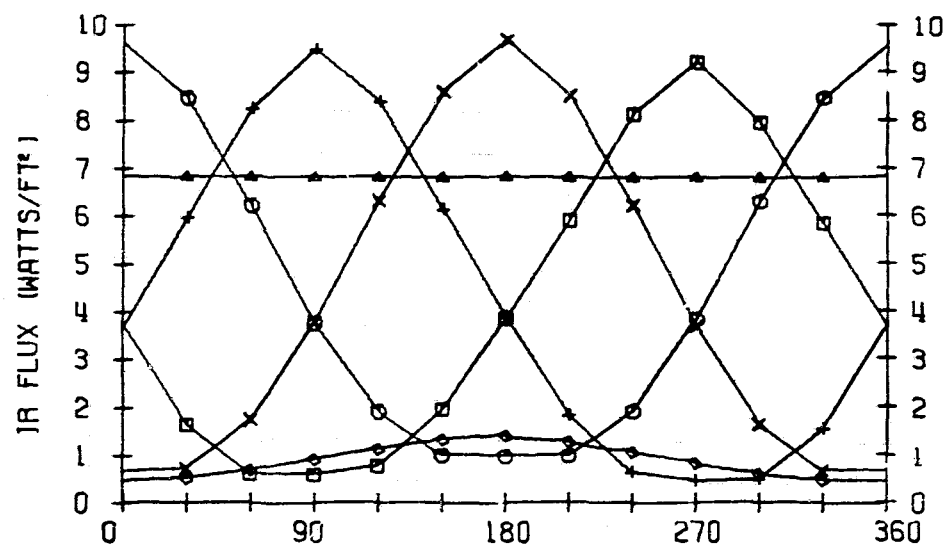
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.6	4.2	4.8	2.5	2.2	0.9
R	+Y (○)	3.7	4.4	5.6	2.1	5.2	1.6
F	+Z (Δ)	6.6	6.8	6.8	5.3	6.1	4.0
L	-X (+)	3.7	4.2	4.9	2.7	5.1	2.8
U	-Y (×)	3.8	4.3	5.6	2.1	5.2	1.6
X	-Z (◇)	0.8	0.9	1.1	0.9	0.9	0.7
U	+X (□)	0.0	0.0	0.0	0.0	0.0	0.0
V	+Y (○)	0.0	0.0	0.0	0.0	0.0	0.0
F	+Z (Δ)	0.0	0.0	0.0	0.0	0.0	0.0
L	-X (+)	0.0	0.0	0.0	0.0	0.0	0.0
U	-Y (×)	0.0	0.0	0.0	0.0	0.0	0.0
X	-Z (◇)	0.0	0.0	0.0	0.0	0.0	0.0

250 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

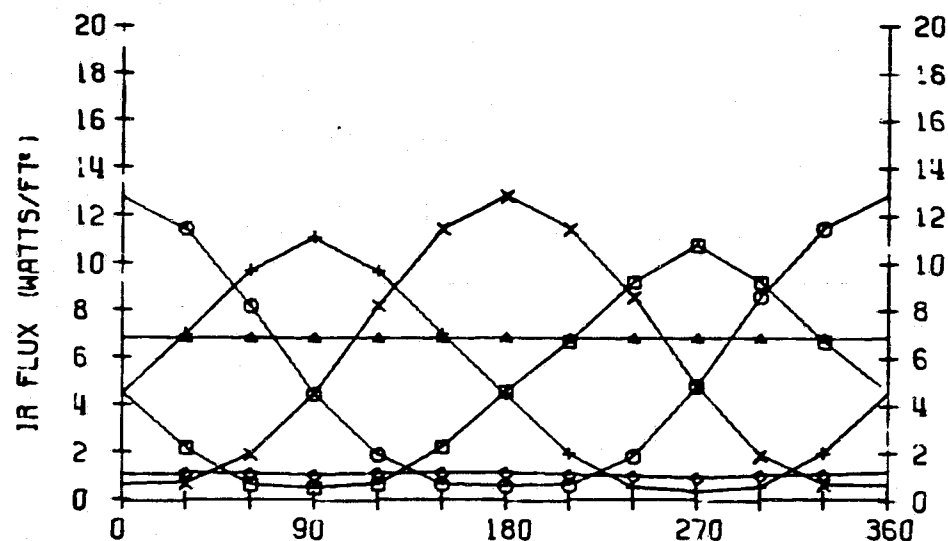


LOCATION 2

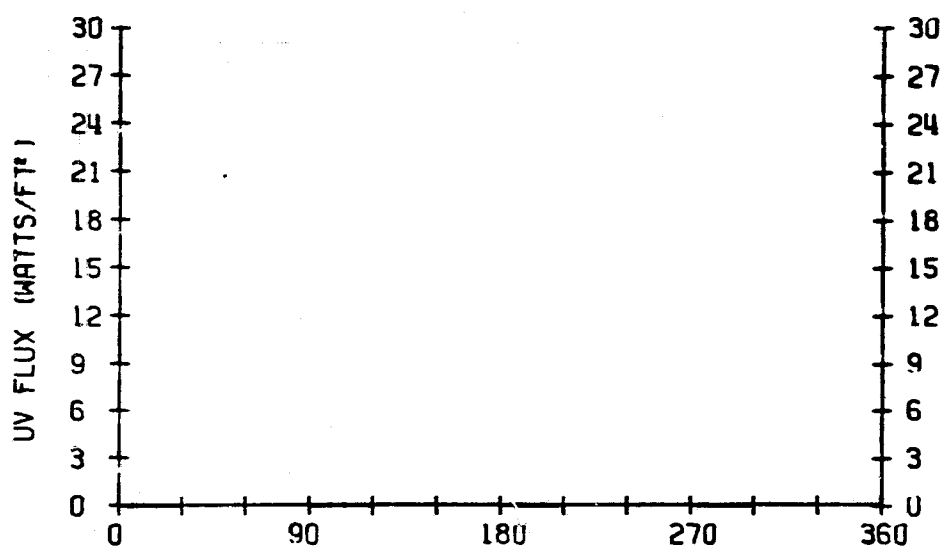
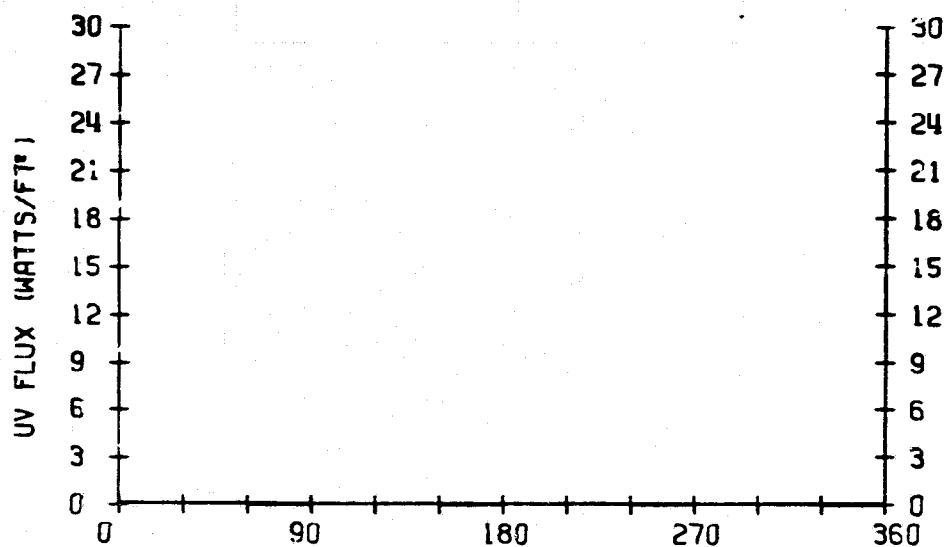
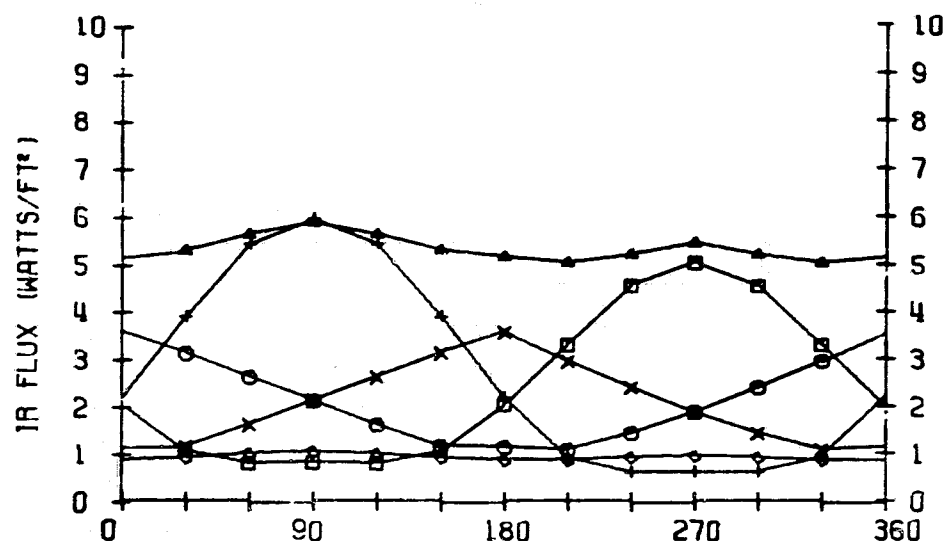


250 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

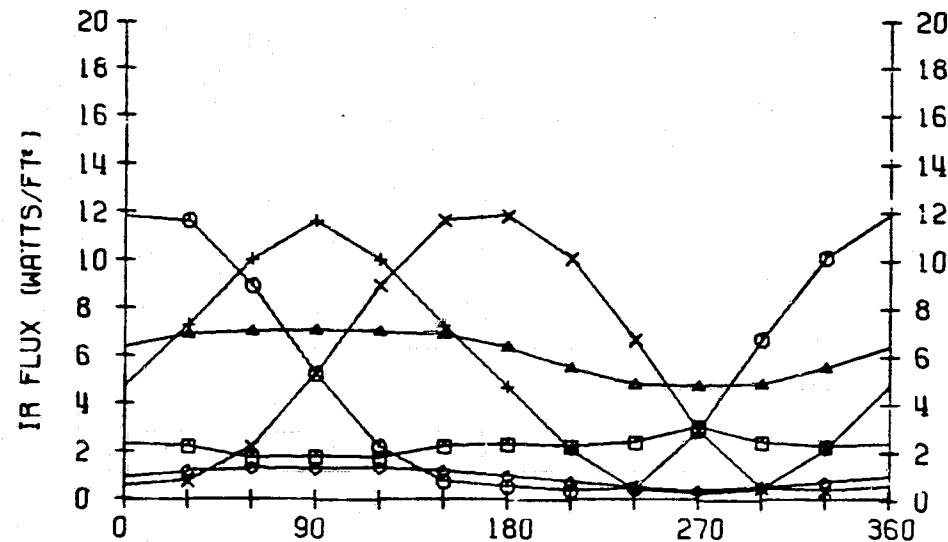


ORBIT POSITION (DEG)

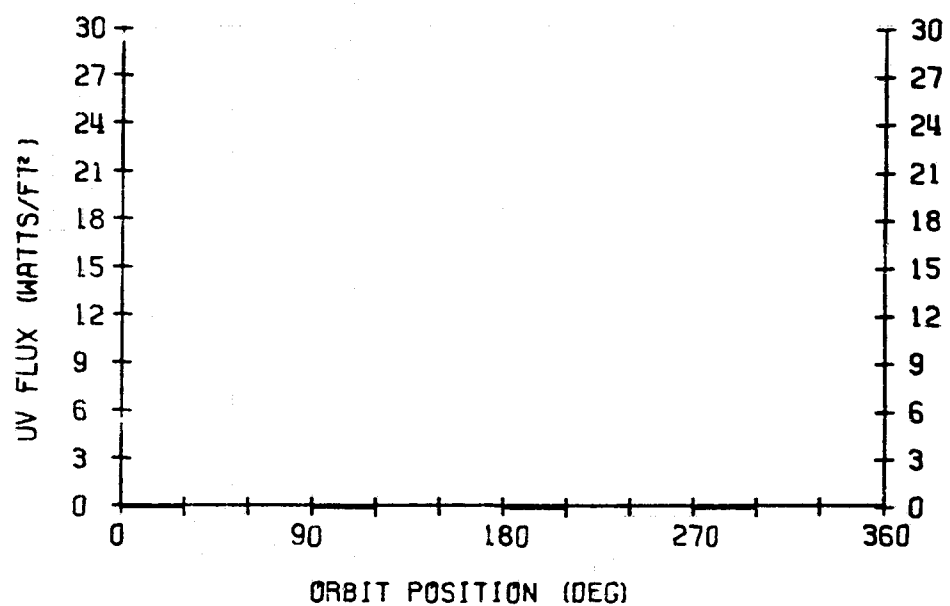
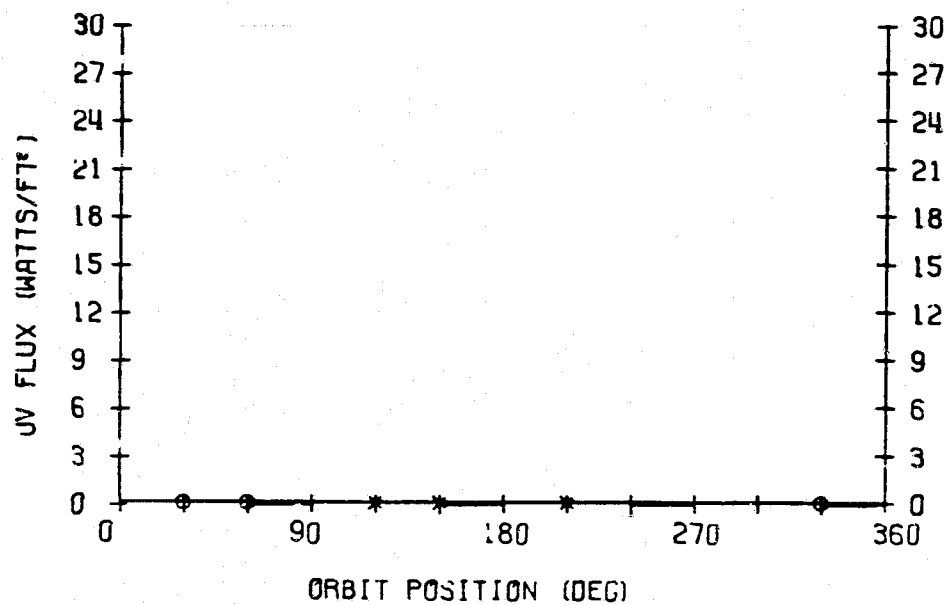
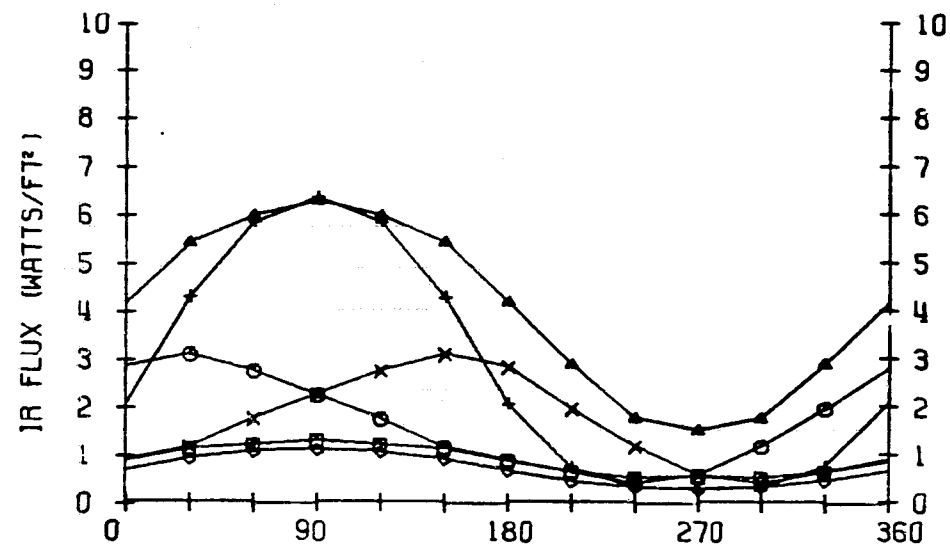
ORBIT POSITION (DEG)

250 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.7	3.3	2.6	4.5	5.2	6.2
R	+Y (○)	3.7	3.2	2.1	4.8	2.7	5.3
F	+Z (△)	0.1	0.1	0.0	1.1	0.7	2.4
L	-X (+)	3.5	3.3	2.8	4.2	2.5	4.3
U	-Y (X)	3.7	2.9	2.2	4.8	2.7	5.3
X	-Z (◇)	5.6	6.1	5.5	5.8	6.0	6.0

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

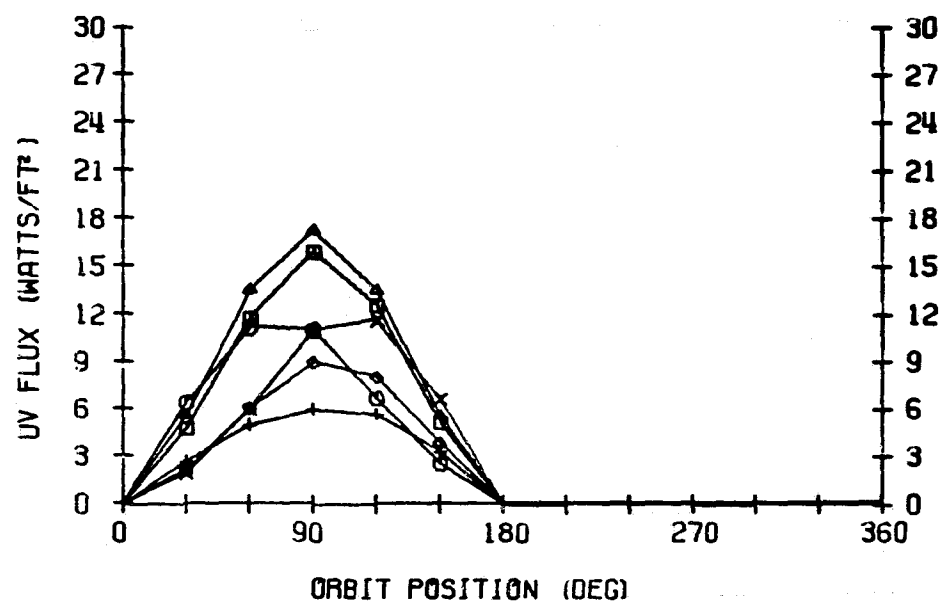
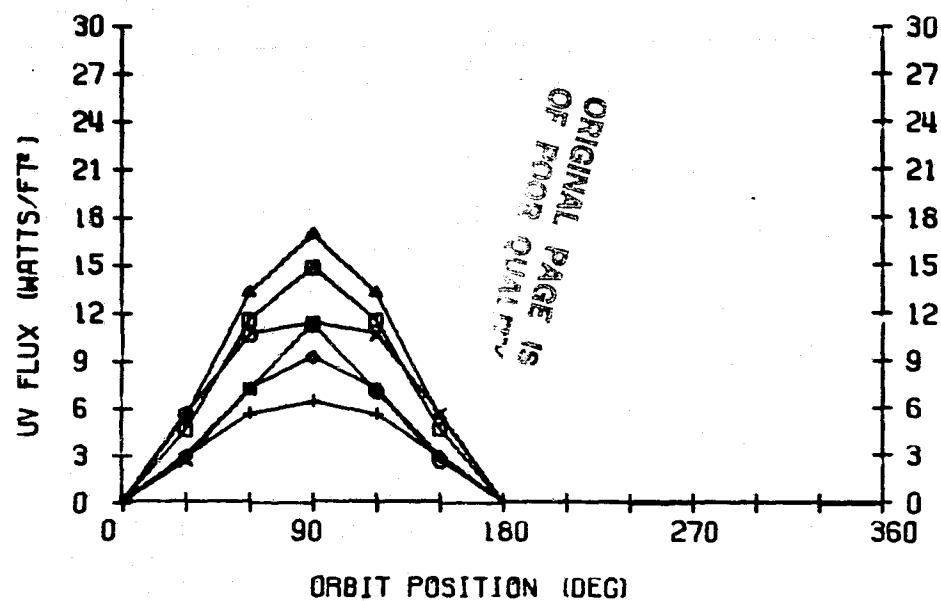
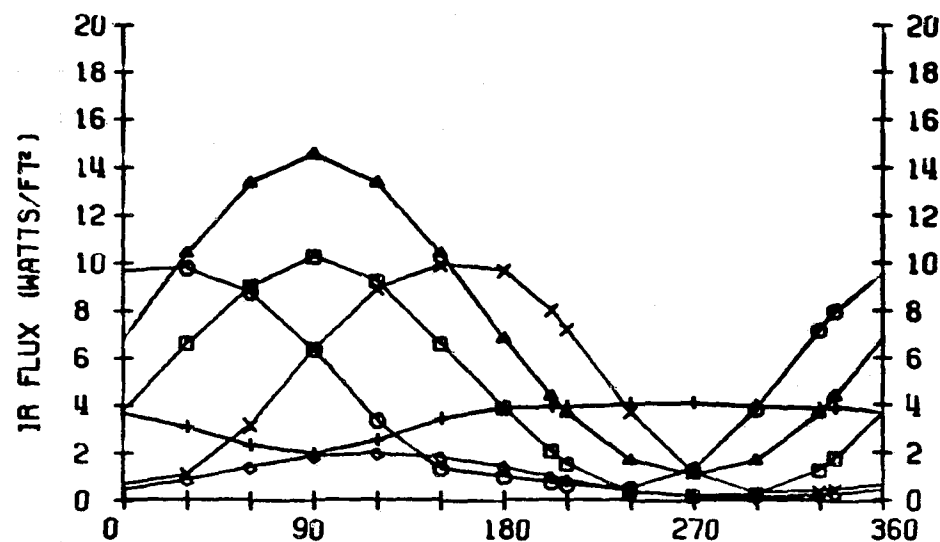
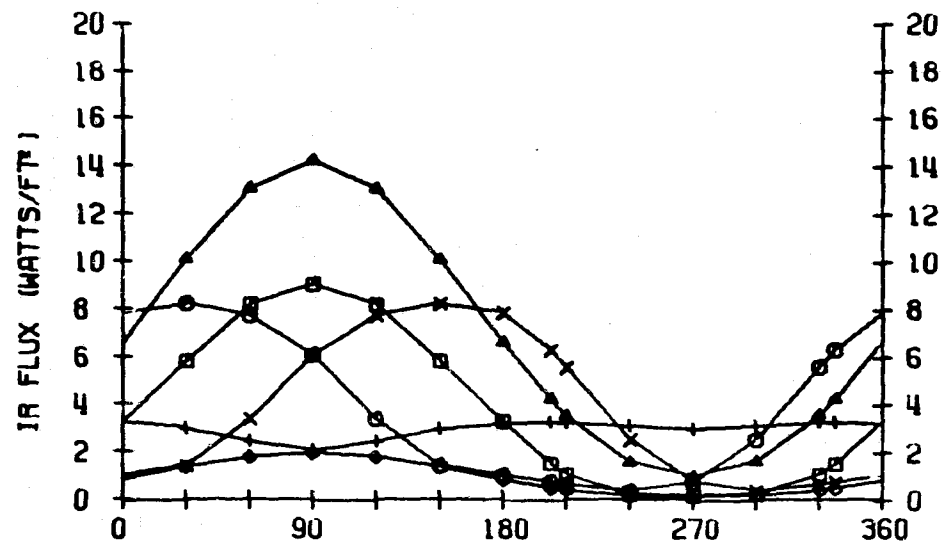
250 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.9	4.4	5.0	2.7	2.3	0.9
R	+Y (○)	3.8	4.5	5.6	2.2	5.1	1.6
F	+Z (Δ)	7.1	7.3	7.3	5.8	6.5	4.3
L	-X (+)	2.9	3.4	4.1	2.1	4.3	2.1
U	-Y (X)	3.8	4.4	5.6	2.2	5.1	1.6
X	-Z (◇)	0.9	0.9	1.1	1.0	0.9	0.7
U	+X (□)	3.9	4.2	4.3	3.4	2.0	1.6
V	+Y (○)	3.1	3.2	3.3	2.9	2.6	2.0
F	+Z (Δ)	4.5	4.6	4.6	4.2	4.0	3.0
L	-X (+)	2.0	1.9	1.9	2.2	1.7	1.8
U	-Y (X)	3.1	3.1	3.3	2.9	2.6	2.0
X	-Z (◇)	2.5	2.4	2.3	2.7	1.7	1.9

250 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

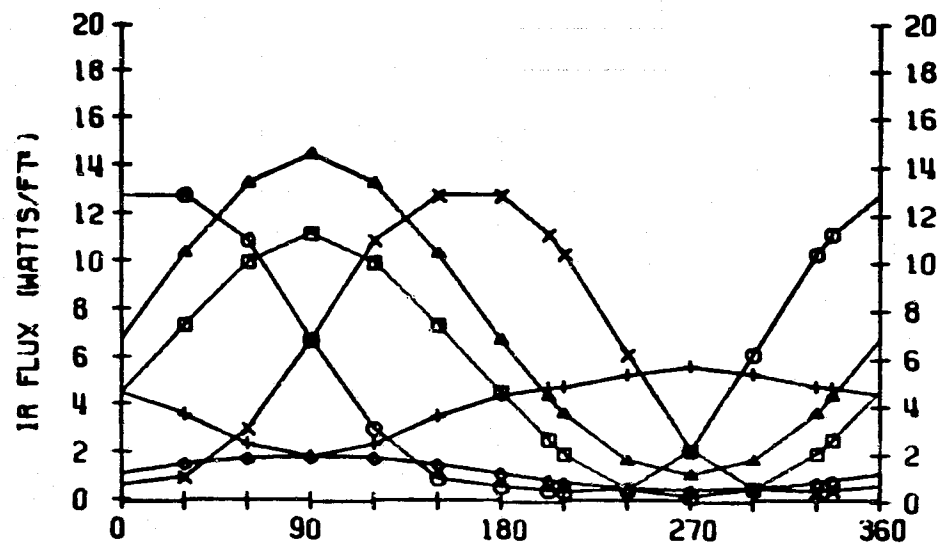
LOCATION 2



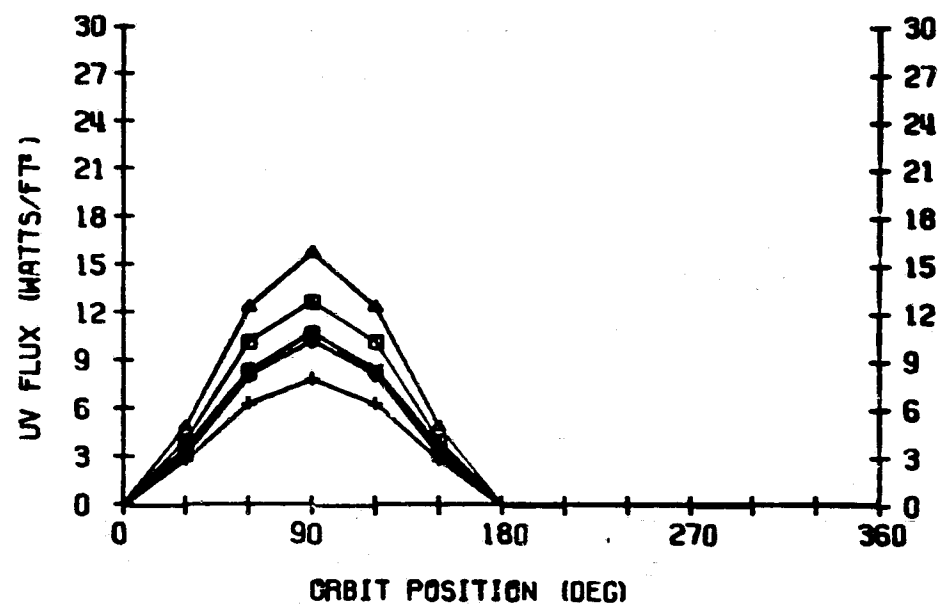
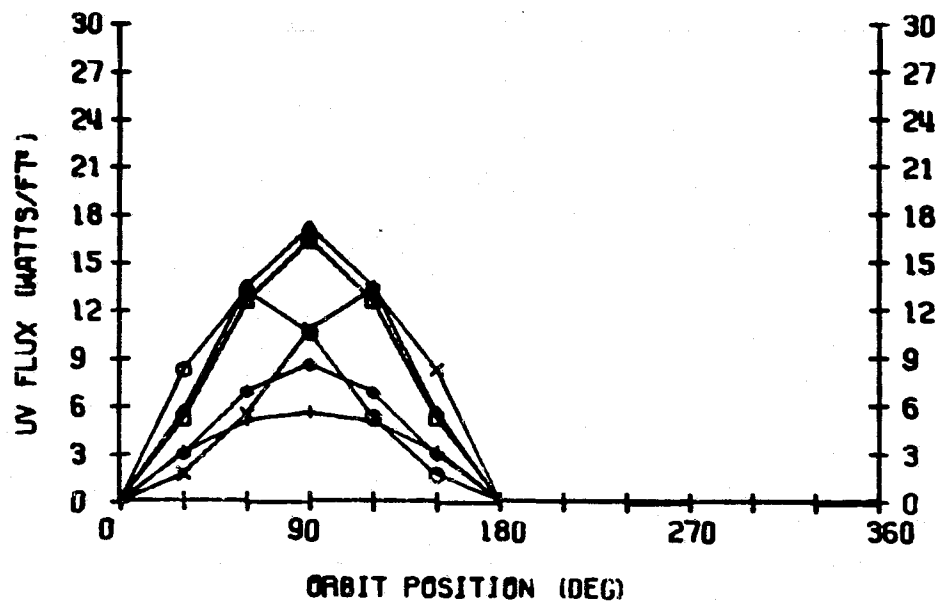
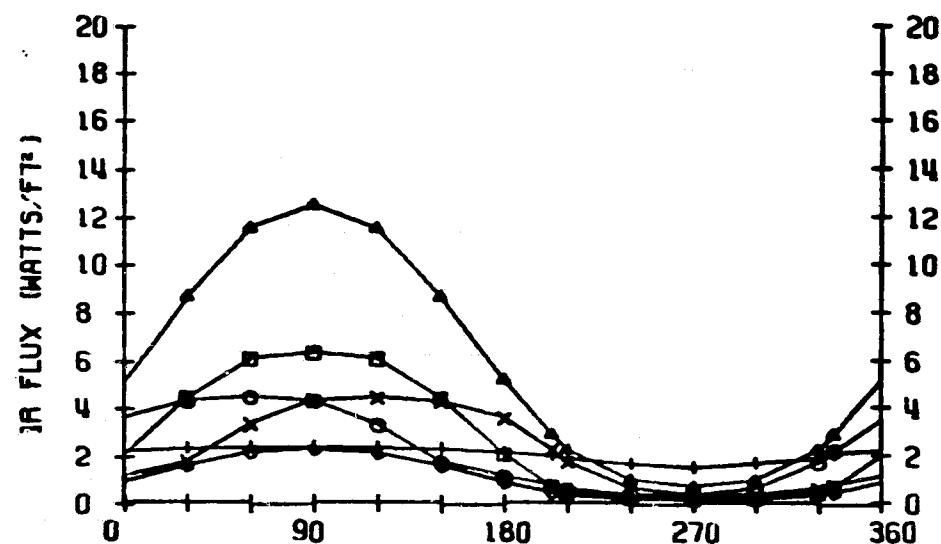
ORIGINAL
PAGE IS
OF POOR QUALITY

250 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

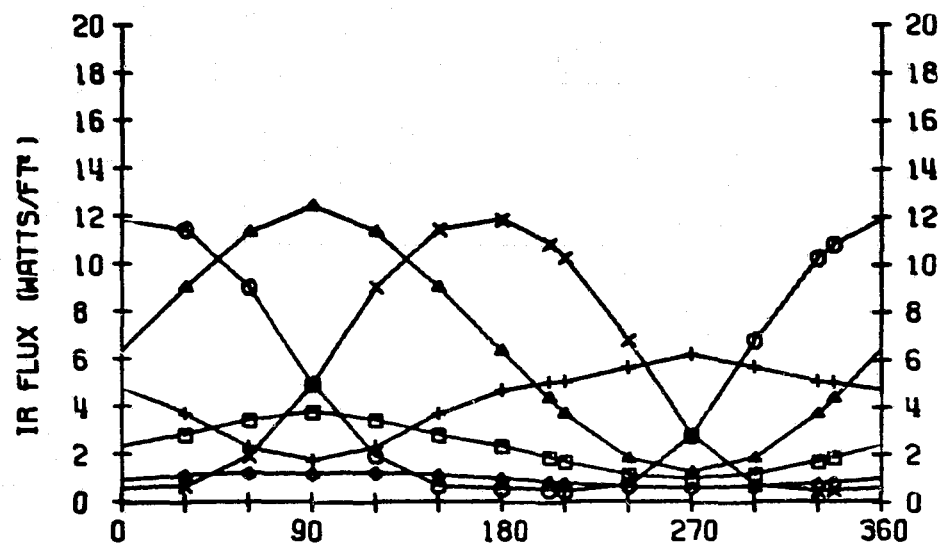


LOCATION 4

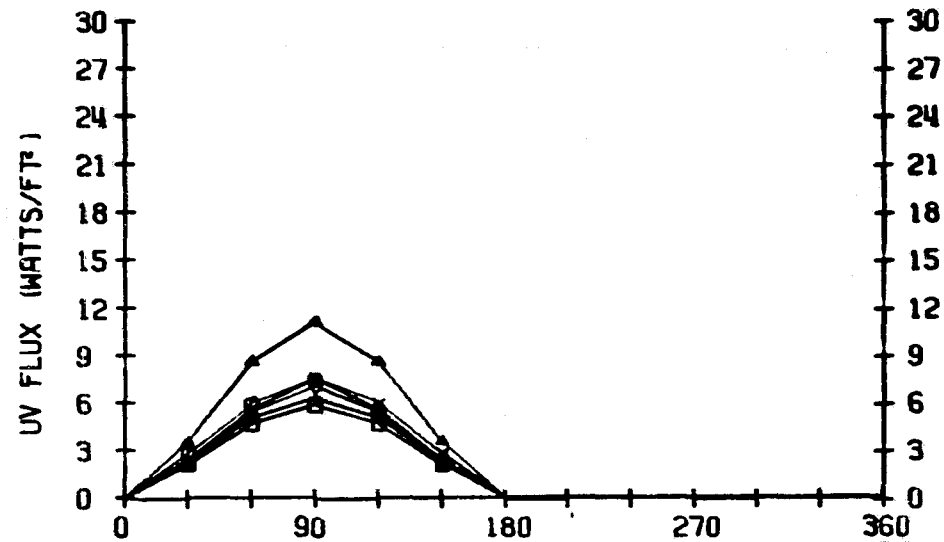
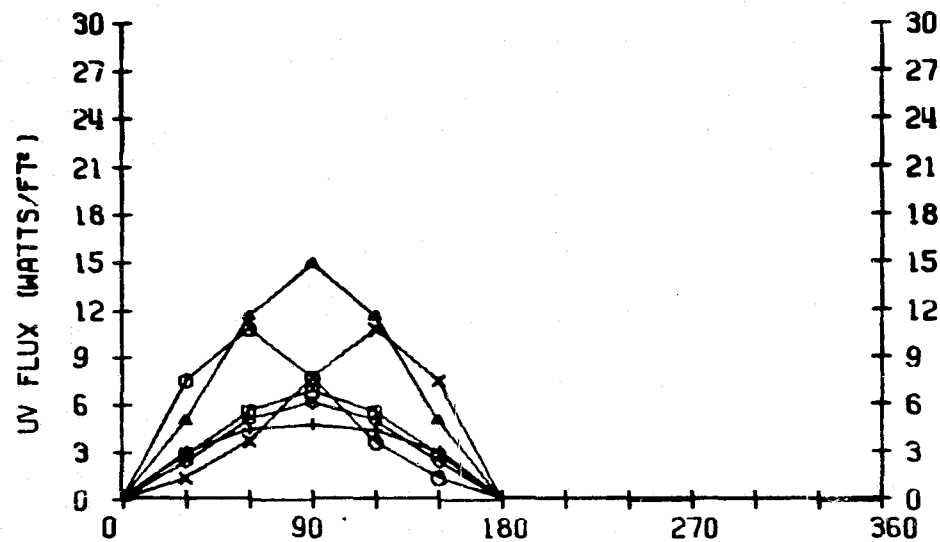
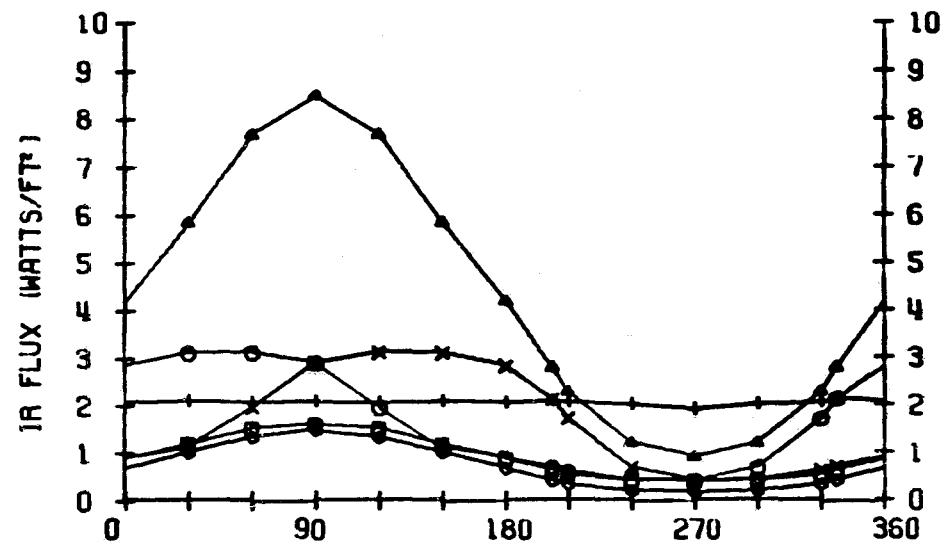


250 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	4.9	4.5	3.5	6.2	5.9	7.4
R	+Y (○)	5.2	4.4	2.9	6.9	3.3	6.7
F	+Z (△)	0.1	0.1	0.1	1.4	0.7	2.8
L	-X (+)	5.1	4.7	4.1	6.2	3.4	5.7
U	-Y (X)	5.1	4.1	3.0	6.8	3.3	6.7
X	-Z (◇)	8.0	8.5	7.8	8.4	7.6	7.8

FLUX DATA
FOR
ALTITUDE - 250 km
ORIENTATION NO. 7

Bay earth oriented, nose in direction of flight

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

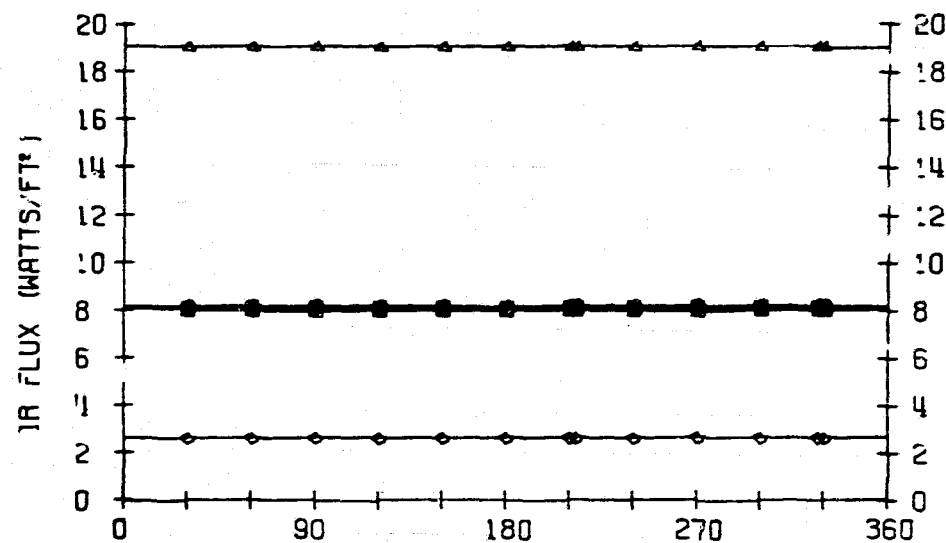
FOR

250 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

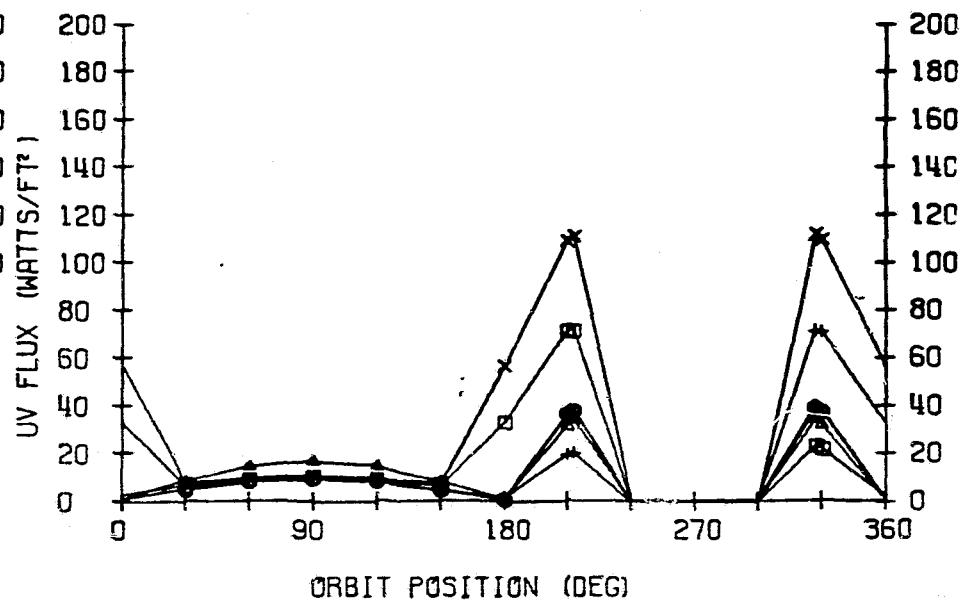
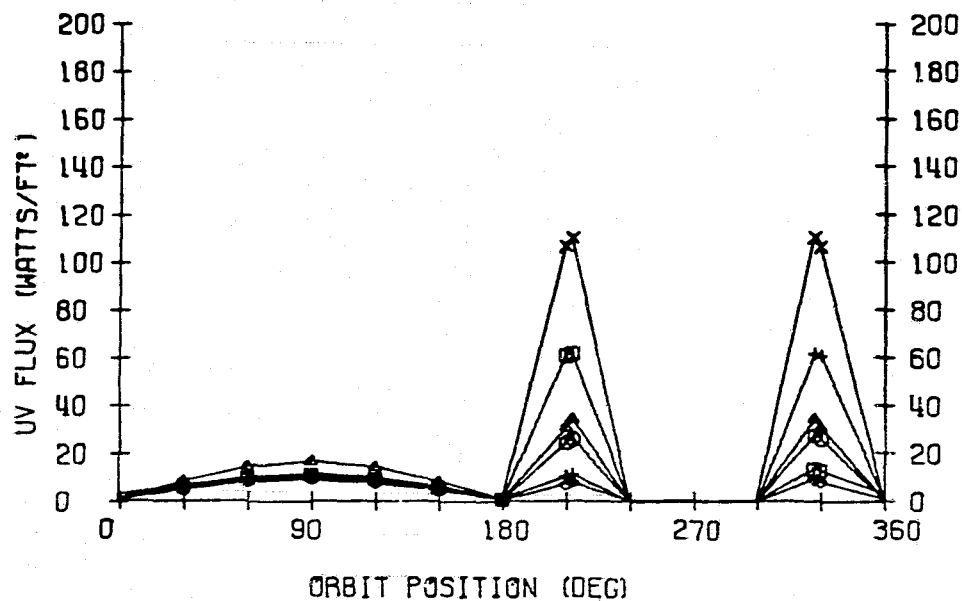
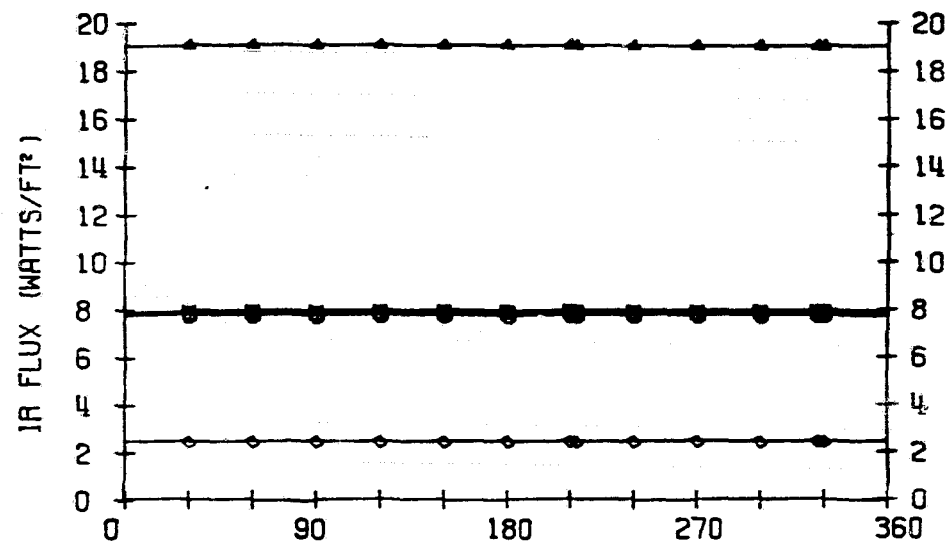
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	8.0	7.9	7.8	6.8	4.2	2.4
R	+Y (○)	8.2	7.8	7.6	5.9	6.9	4.5
F	+Z (△)	19.0	19.0	19.0	16.7	17.5	12.9
L	-X (+)	8.1	7.9	7.8	7.1	7.8	7.0
U	-Y (X)	8.2	8.0	7.6	5.9	6.9	4.5
X	-Z (◇)	2.6	2.4	2.3	3.0	1.9	2.2
U	+X (□)	7.5	11.0	16.5	4.8	12.9	4.3
V	+Y (○)	5.9	6.7	4.3	5.3	4.7	4.8
F	+Z (△)	8.3	8.4	8.4	5.6	9.0	6.0
L	-X (+)	7.1	10.7	13.7	4.5	16.2	4.5
U	-Y (X)	14.4	24.0	47.8	4.0	52.9	4.1
X	-Z (◇)	3.7	6.7	5.6	3.8	5.7	3.6

250 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1

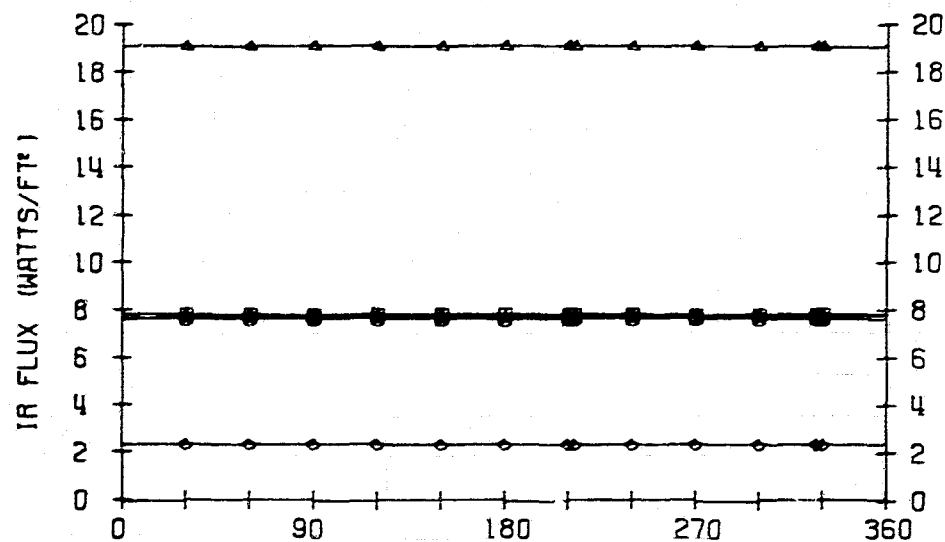


LOCATION 2

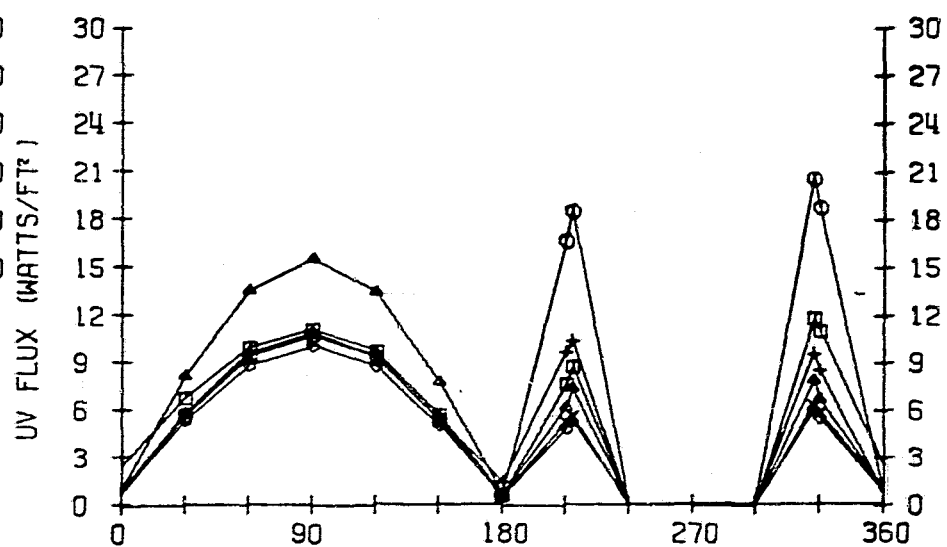
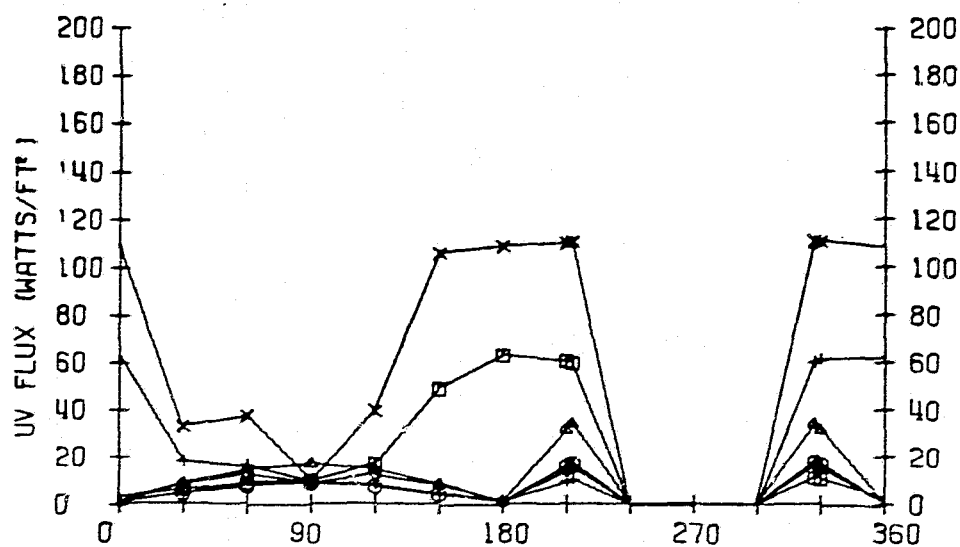
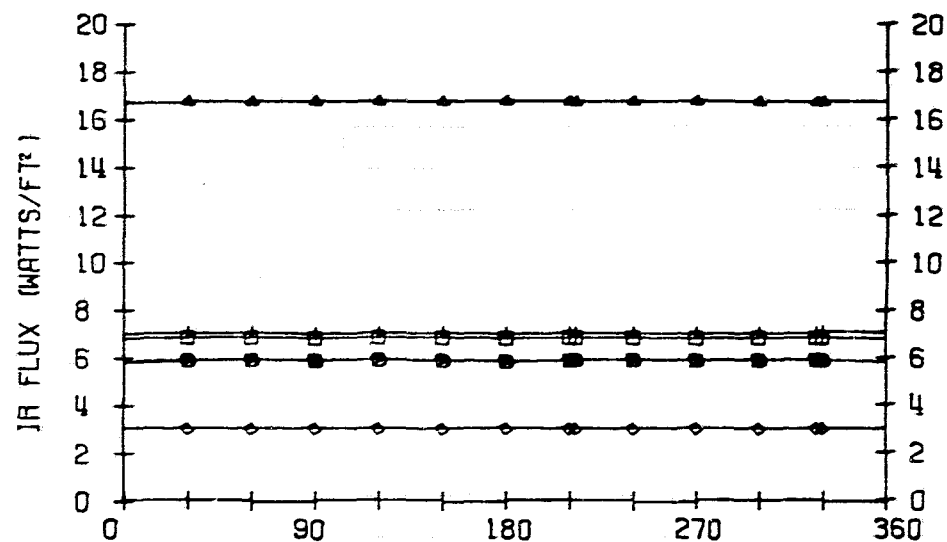


250 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3



LOCATION 4

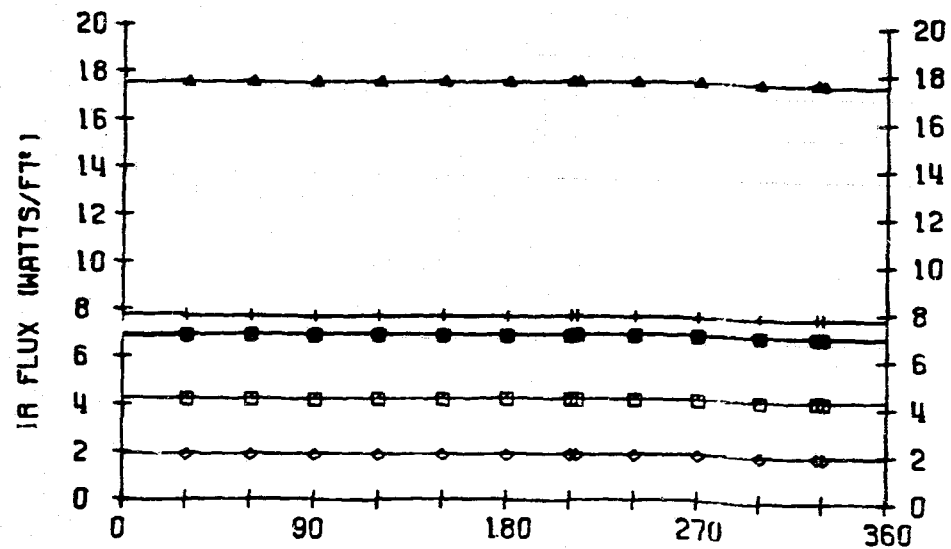


ORBIT POSITION (DEG)

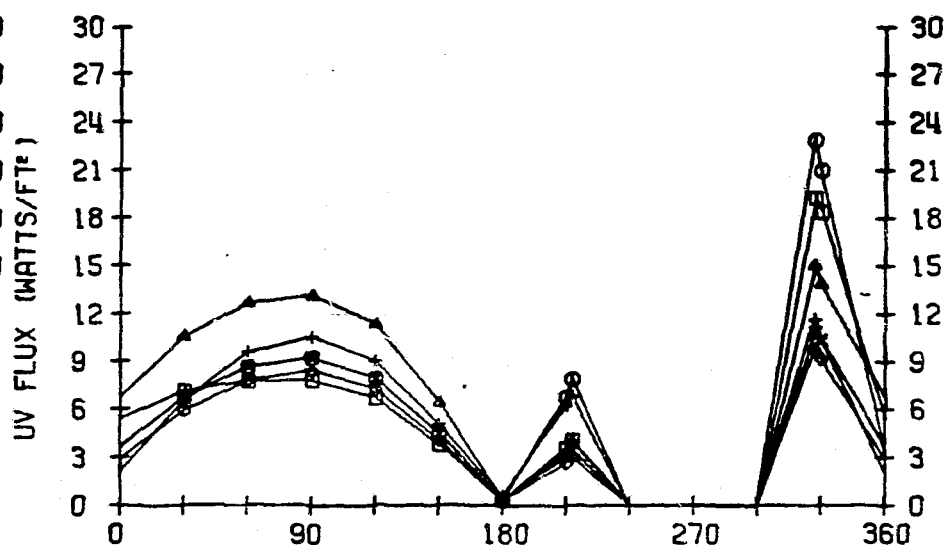
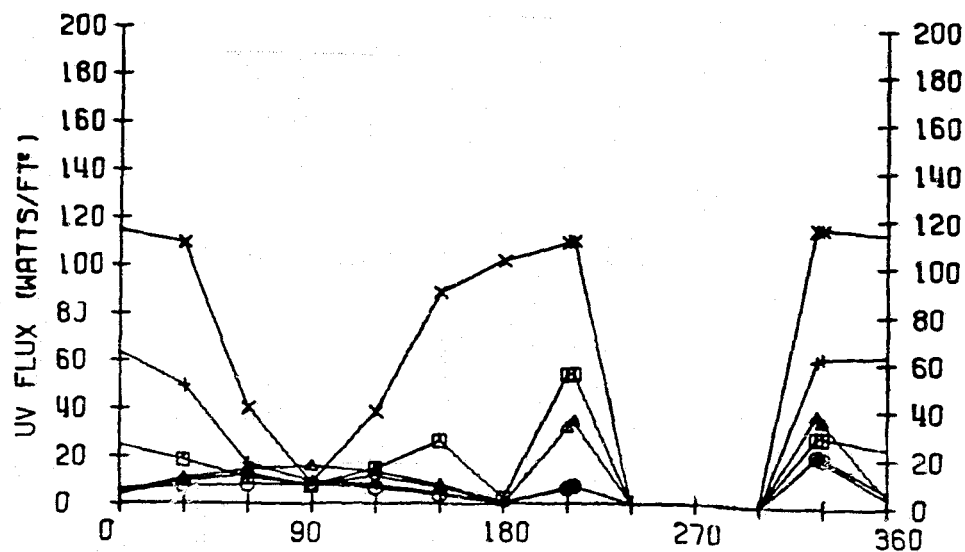
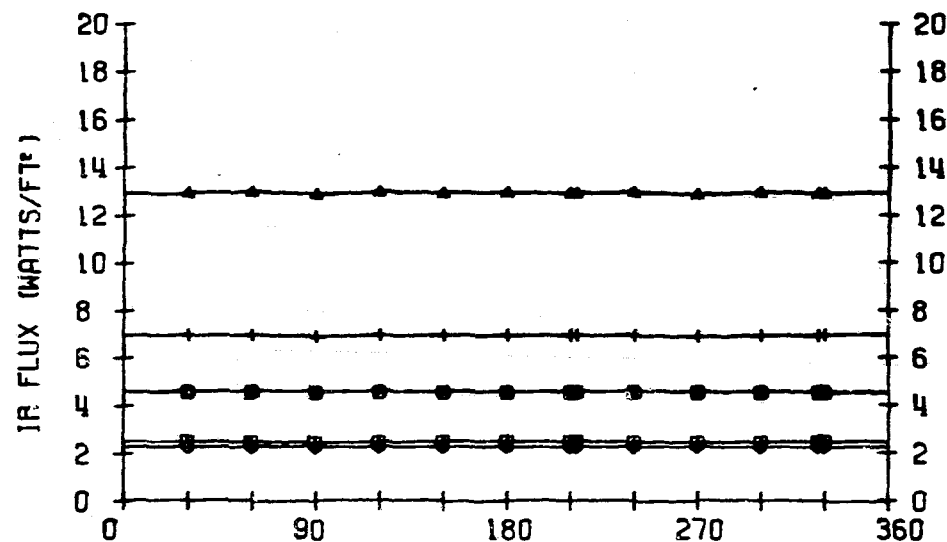
ORBIT POSITION (DEG)

250 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	13.4	12.7	9.5	16.5	16.7	21.0
R	+Y (○)	14.5	13.3	8.2	16.5	9.8	19.4
F	+Z (△)	0.3	0.2	0.2	3.9	2.1	8.1
L	-X (+)	13.0	12.5	10.3	15.8	9.2	15.9
U	-Y (X)	12.9	10.4	7.6	17.5	9.2	18.9
X	-Z (◇)	20.8	23.7	20.5	22.0	21.4	22.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

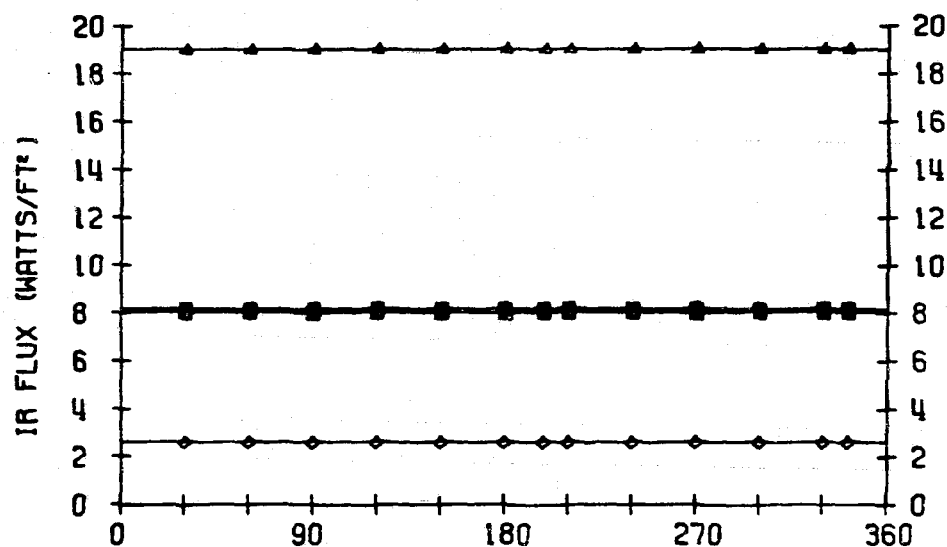
FOR

250 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

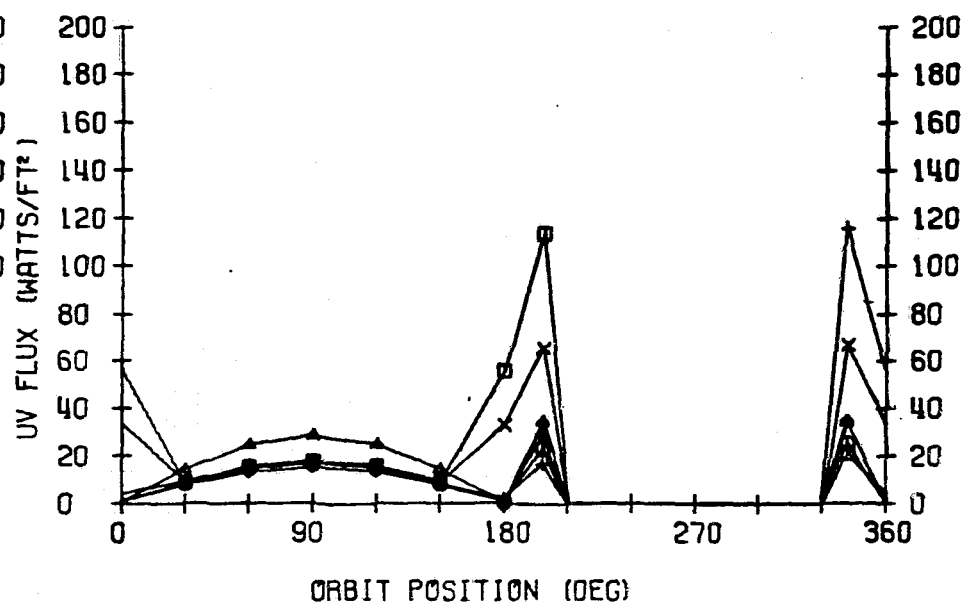
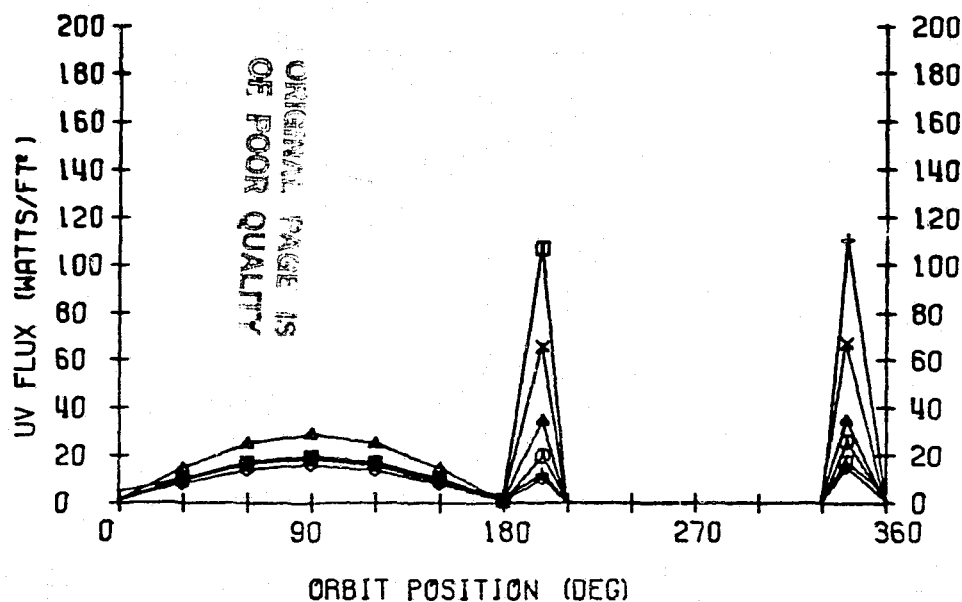
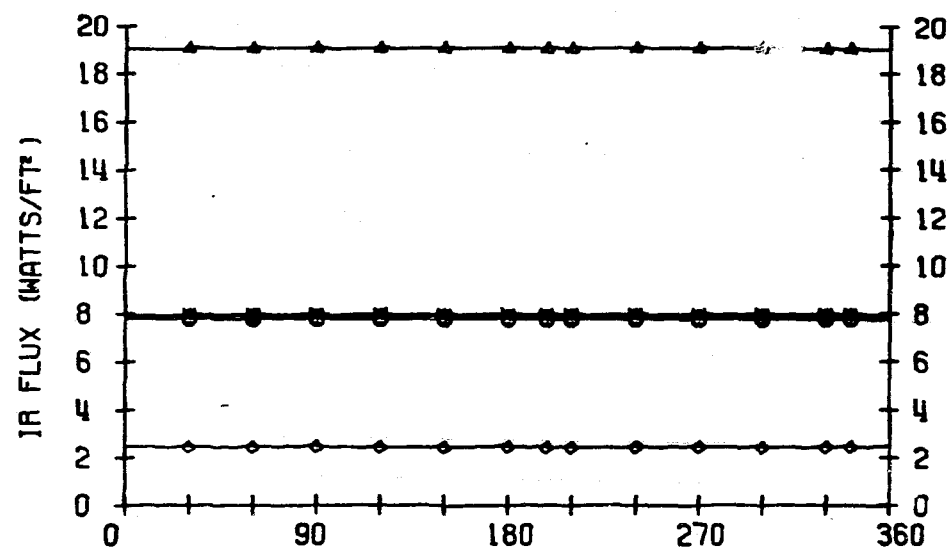
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	8.0	7.9	7.8	6.8	4.2	2.4
R	+Y (○)	8.2	7.8	7.6	5.9	7.0	4.6
F	+Z (△)	19.0	19.0	19.0	16.7	17.5	12.9
L	-X (+)	8.0	7.9	7.8	7.1	7.8	7.0
U	-Y (X)	8.2	8.0	7.7	5.9	7.0	4.6
X	-Z (◇)	2.6	2.4	2.3	3.0	1.9	2.2
U	+X (□)	9.6	13.1	16.0	7.1	9.4	6.1
V	+Y (○)	7.2	6.7	5.5	7.1	6.1	6.5
F	+Z (△)	10.8	10.8	10.7	9.5	10.3	8.8
L	-X (+)	9.2	12.9	15.8	7.2	15.7	6.7
U	-Y (X)	9.6	13.5	17.0	6.4	12.1	6.1
X	-Z (◇)	5.7	6.6	5.4	5.9	5.6	5.5

250 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1

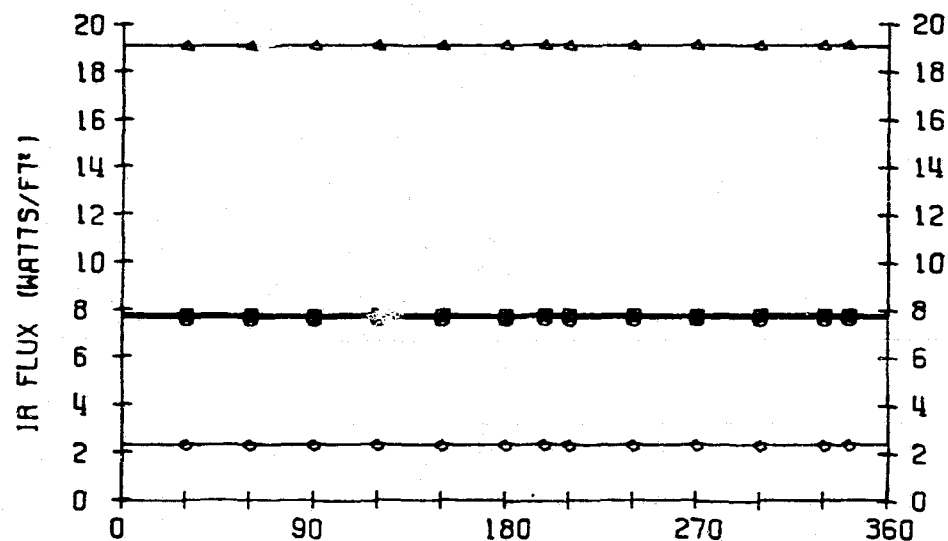


LOCATION 2

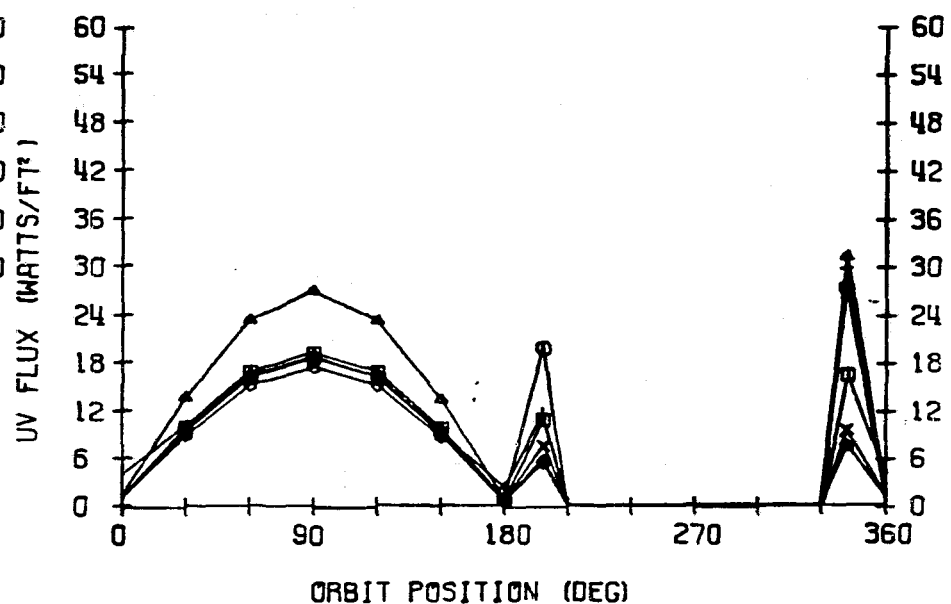
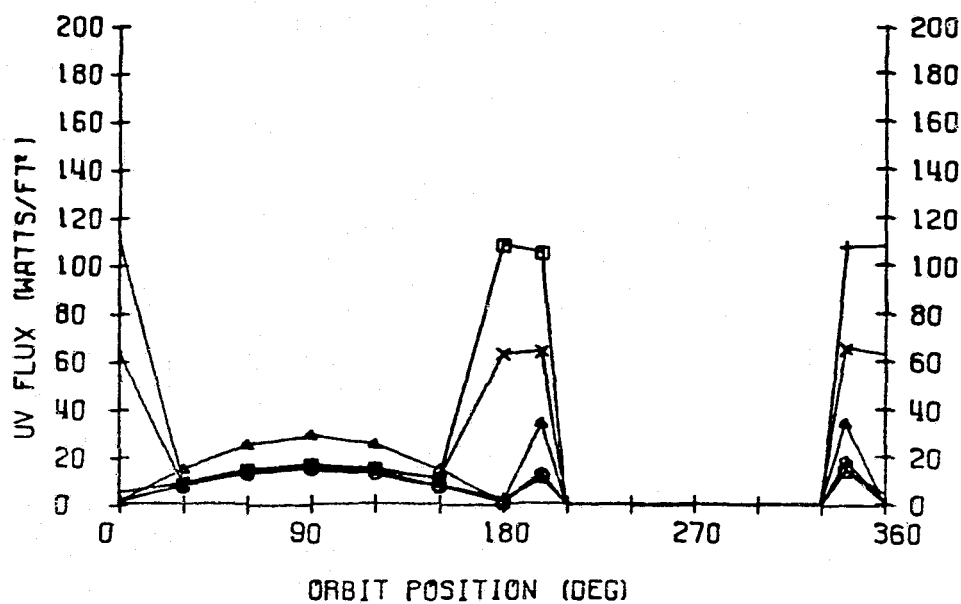
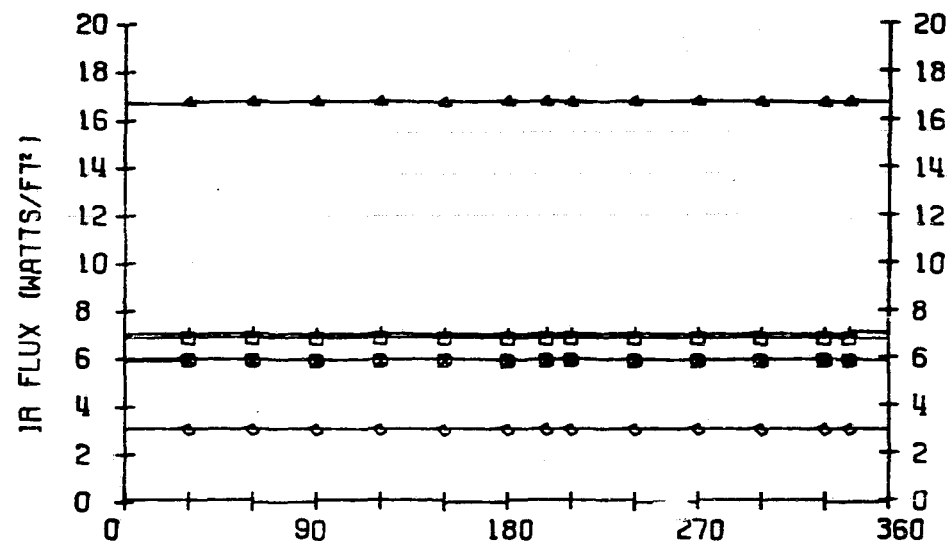


250 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3

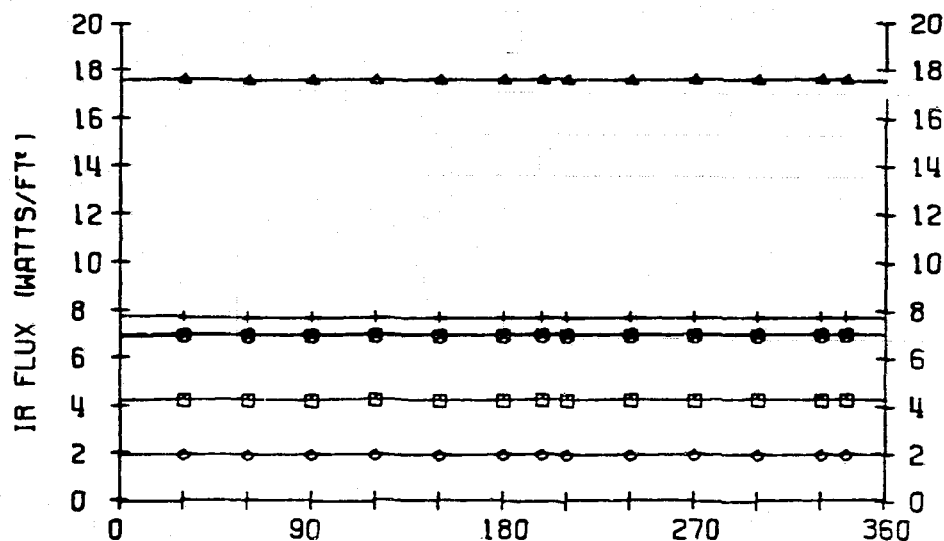


LOCATION 4

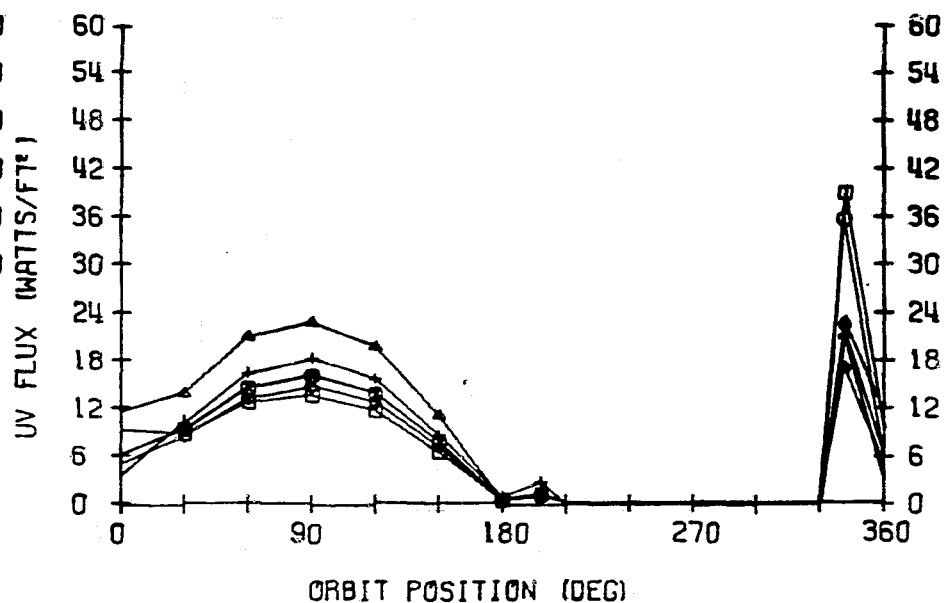
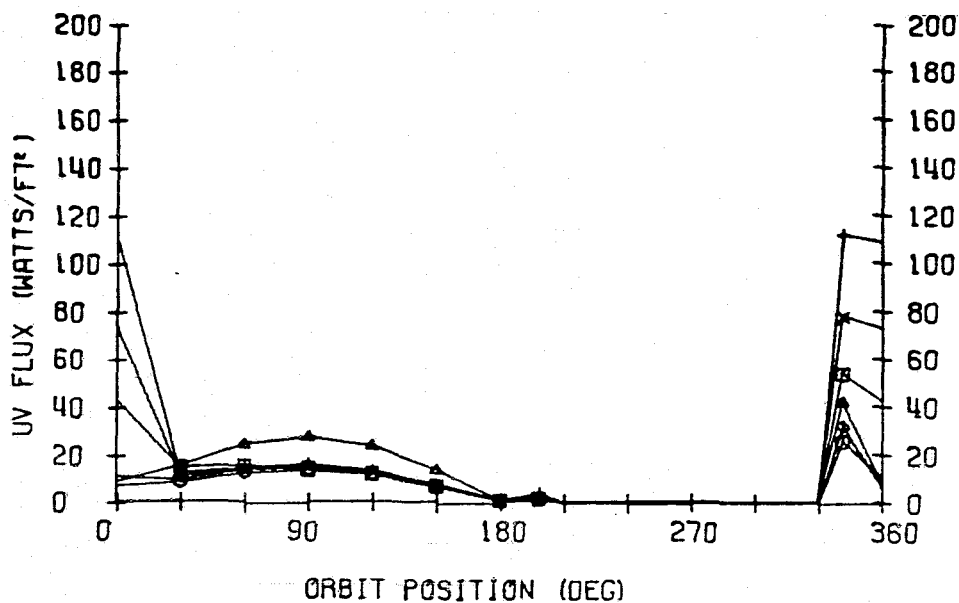
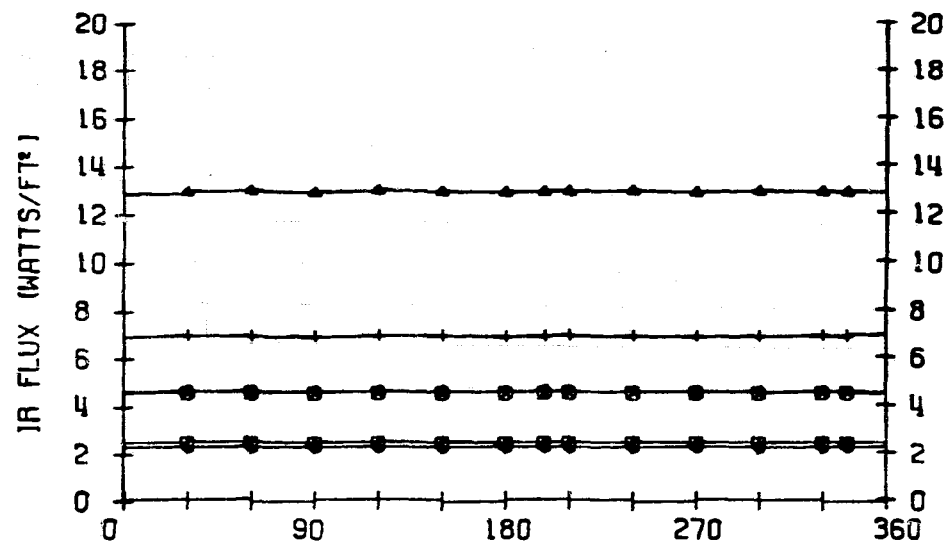


250 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	13.4	12.2	9.6	16.9	17.2	21.8
R	+Y (○)	13.9	11.7	7.8	18.7	9.6	19.9
F	+Z (△)	0.3	0.2	0.2	3.7	2.2	8.1
L	-X (+)	13.1	12.1	10.4	16.1	9.2	16.3
U	-Y (X)	13.1	10.7	7.7	18.0	9.4	19.6
X	-Z (◇)	21.6	22.9	20.7	22.8	21.9	23.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

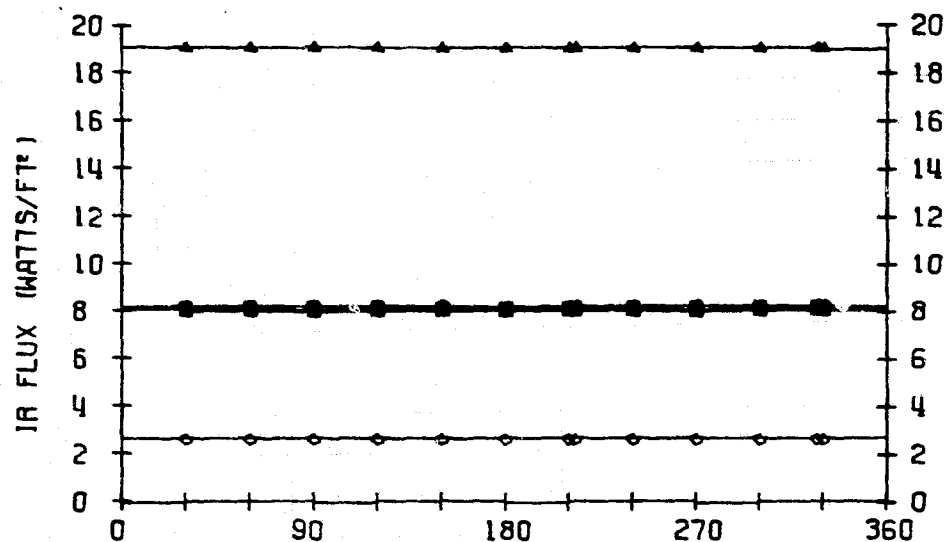
FOR

250 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

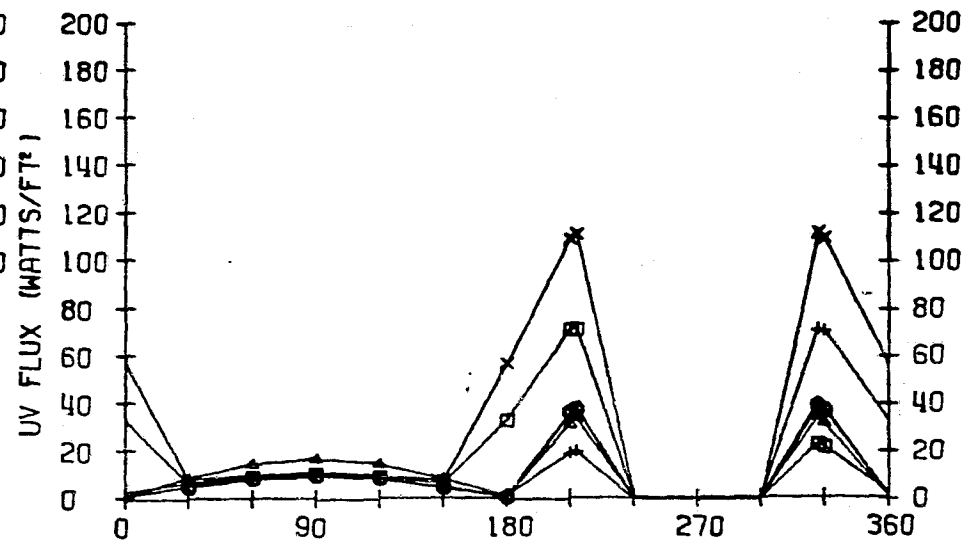
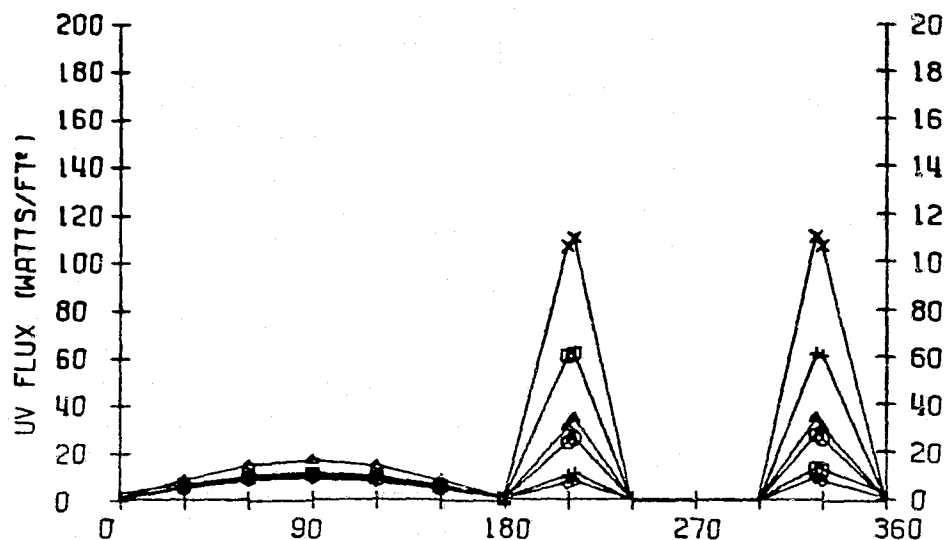
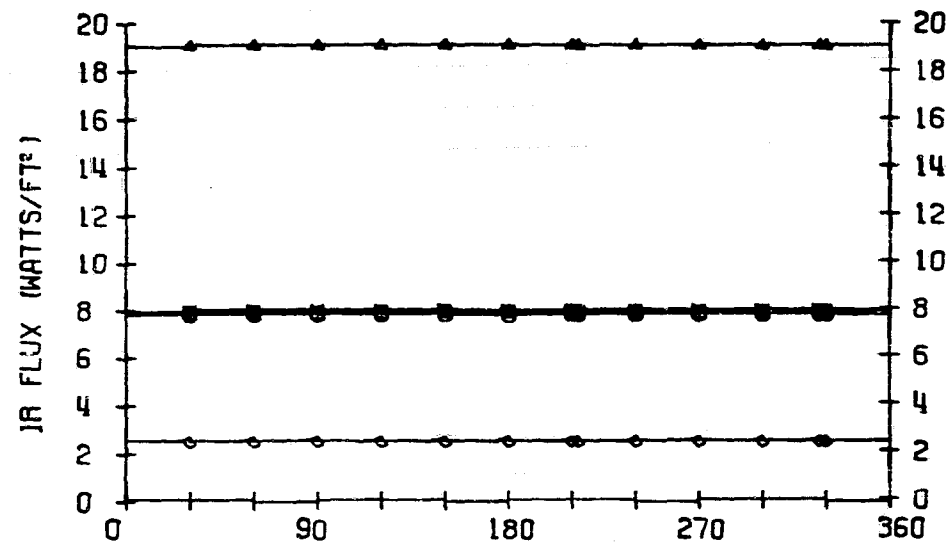
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	8.0	7.9	7.8	6.8	4.2	2.4
R	+Y (○)	8.2	7.8	7.6	5.9	6.9	4.5
F	+Z (△)	19.0	19.0	19.0	16.7	17.5	12.9
L	-X (+)	8.1	7.9	7.8	7.1	7.8	7.0
U	-Y (X)	8.2	8.0	7.6	5.9	6.9	4.5
X	-Z (◇)	2.6	2.4	2.3	3.0	1.9	2.2
U	+X (□)	7.5	11.0	16.5	4.8	12.9	4.3
V	+Y (○)	5.9	6.7	4.3	5.3	4.7	4.8
F	+Z (△)	8.3	8.4	8.4	5.6	9.0	6.0
L	-X (+)	7.1	10.7	13.7	4.5	16.2	4.5
U	-Y (X)	14.4	24.0	47.8	4.0	52.9	4.1
X	-Z (◇)	3.7	6.7	5.6	3.8	5.7	3.6

250 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1



LOCATION 2

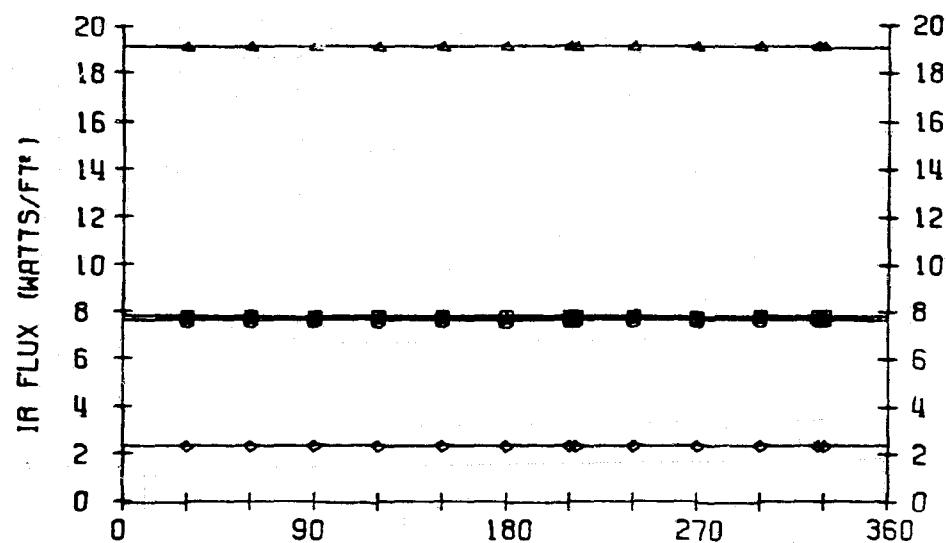


ORBIT POSITION (DEG)

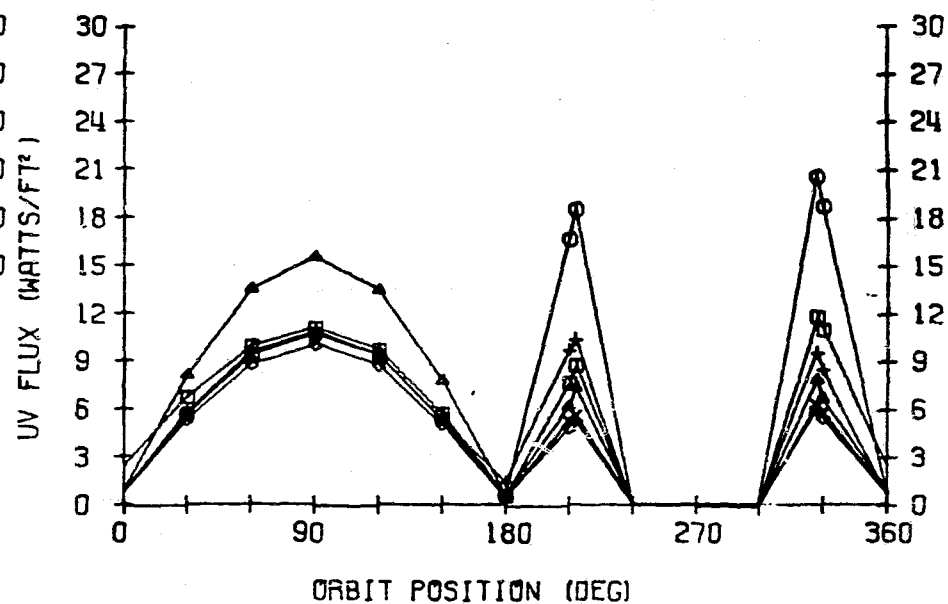
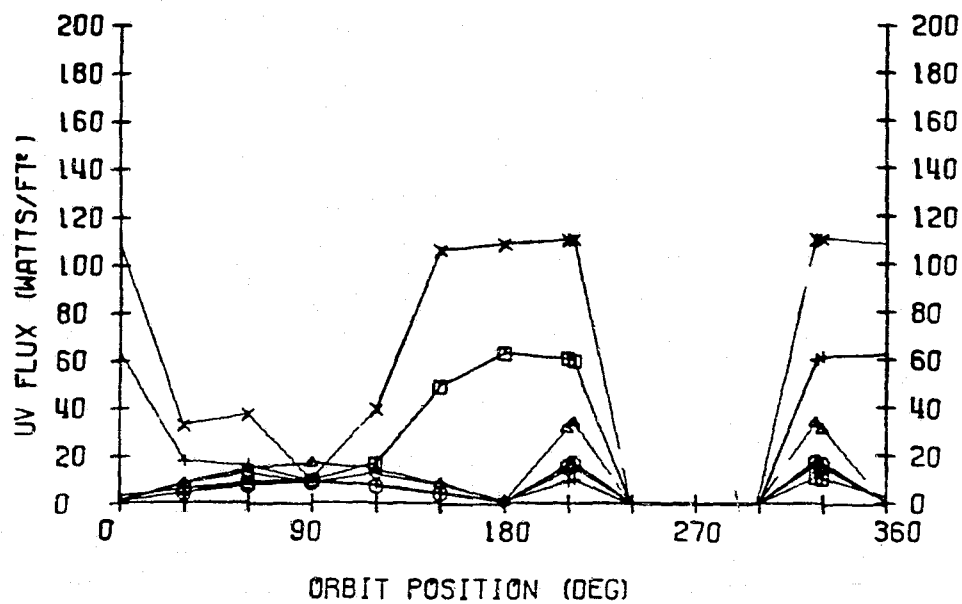
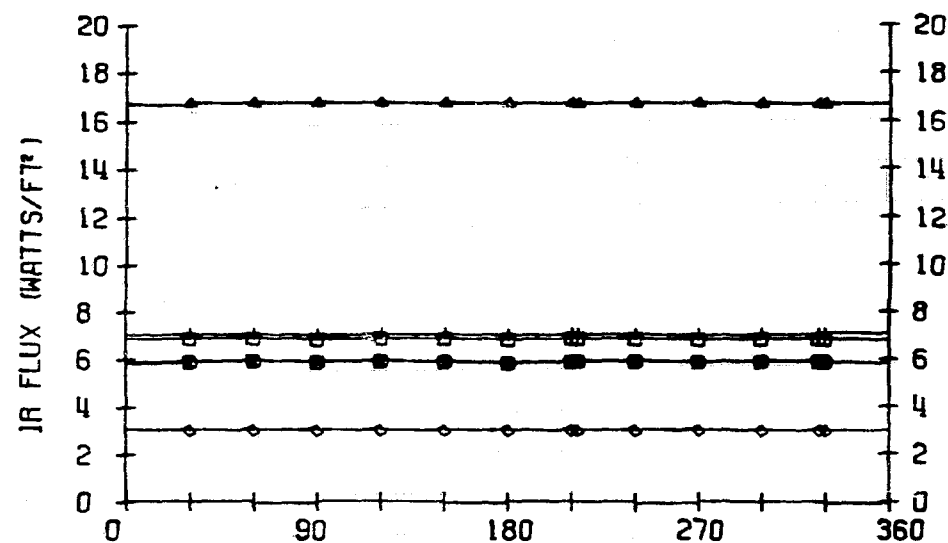
ORBIT POSITION (DEG)

250 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3



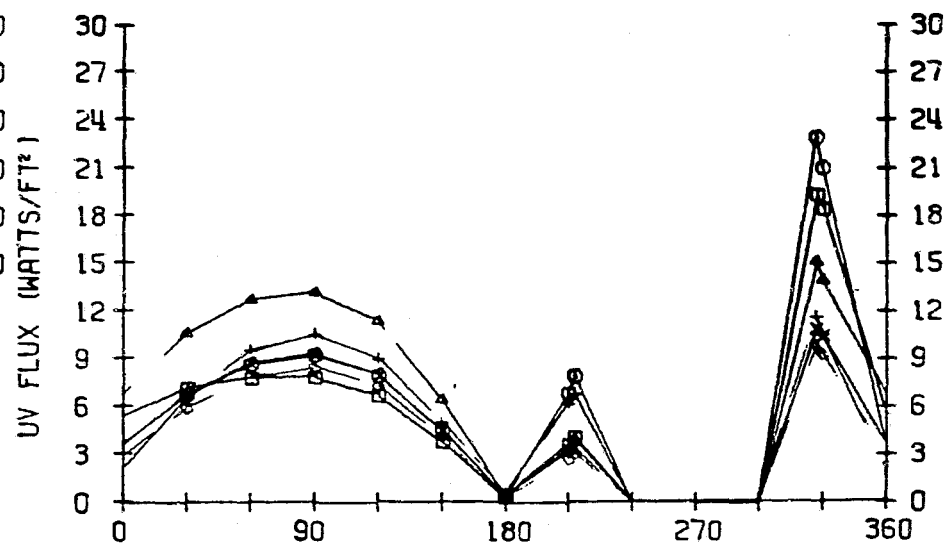
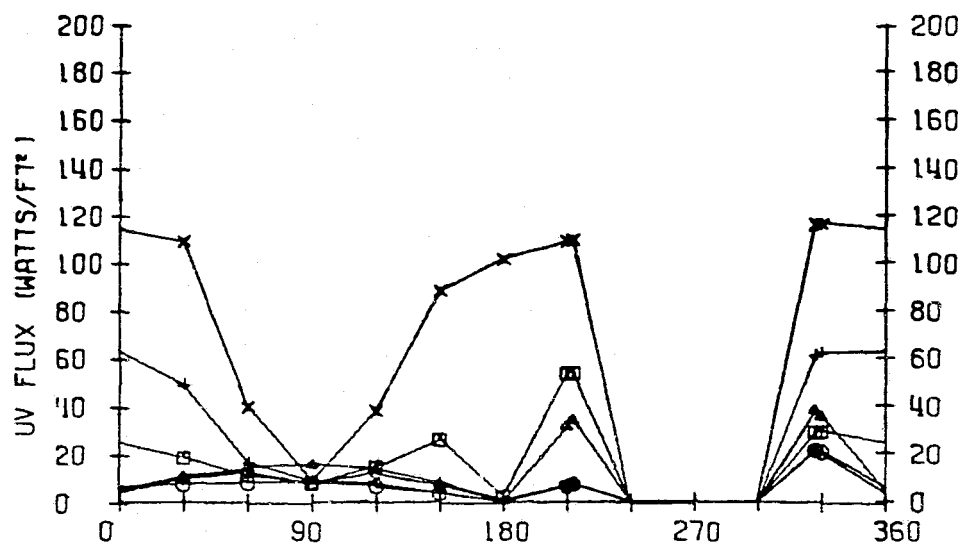
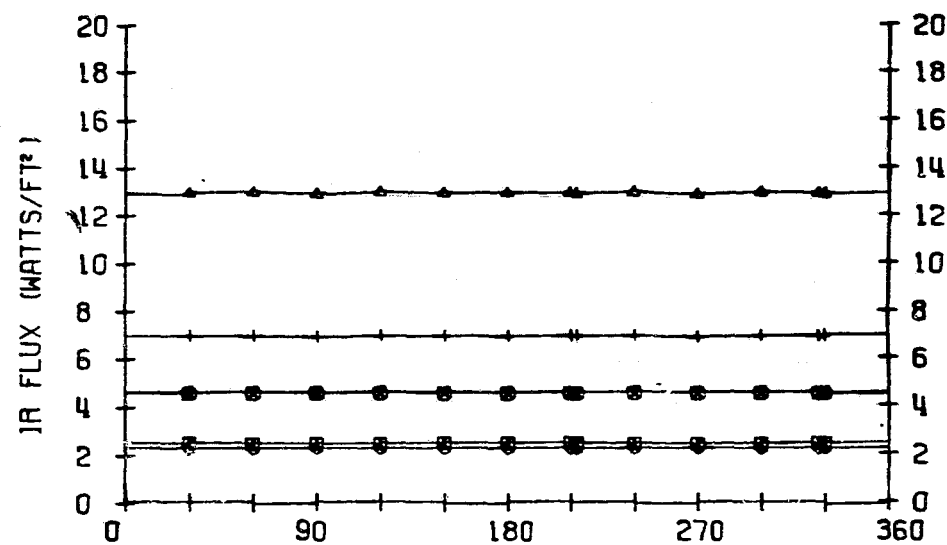
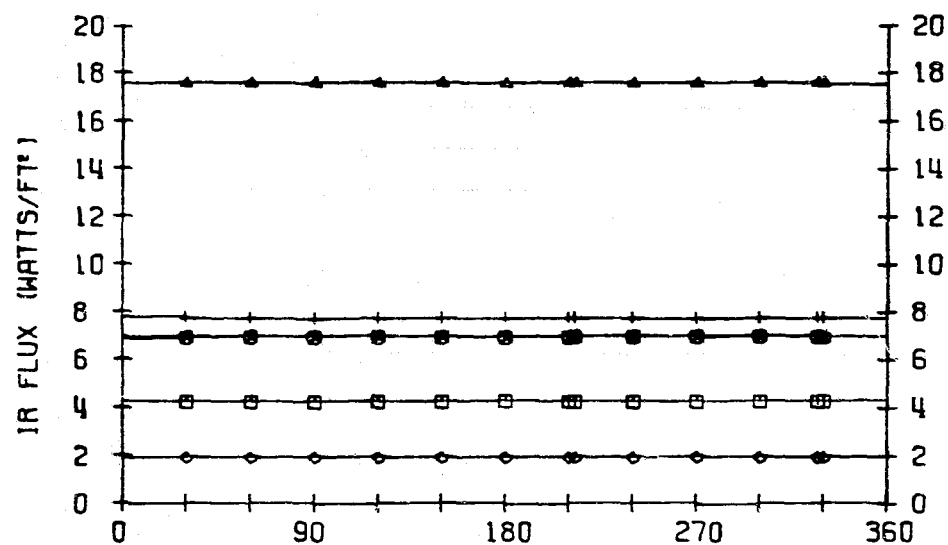
LOCATION 4



250 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5

LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

U
W

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	13.4	12.7	9.5	16.5	16.7	21.0
R	+Y (○)	14.5	13.3	8.2	18.5	9.8	19.4
T	+Z (△)	0.3	0.2	0.2	3.9	2.1	8.1
L	-X (+)	13.0	12.5	10.3	15.8	9.2	15.9
U	-Y (X)	12.9	10.4	7.6	17.5	9.2	18.9
X	-Z (◇)	20.8	23.7	20.5	22.0	21.4	22.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

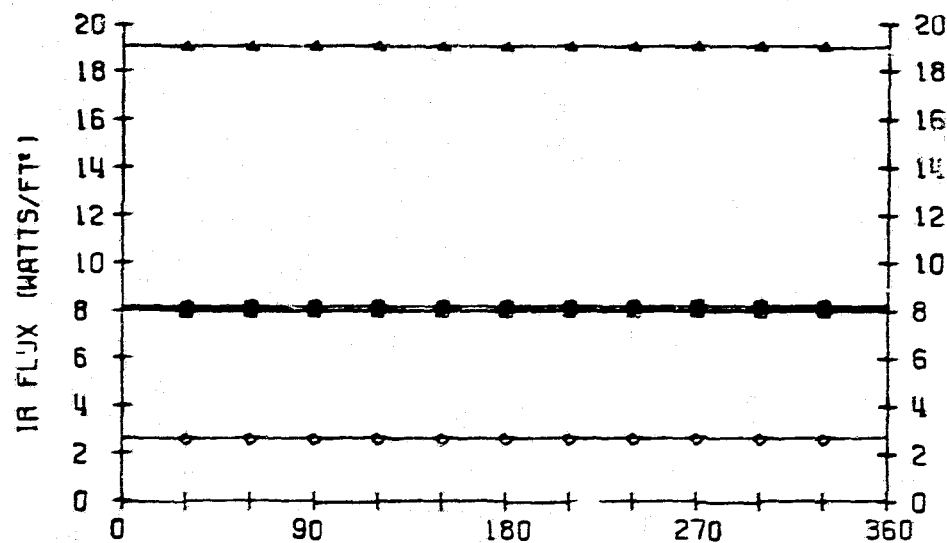
FOR

250 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

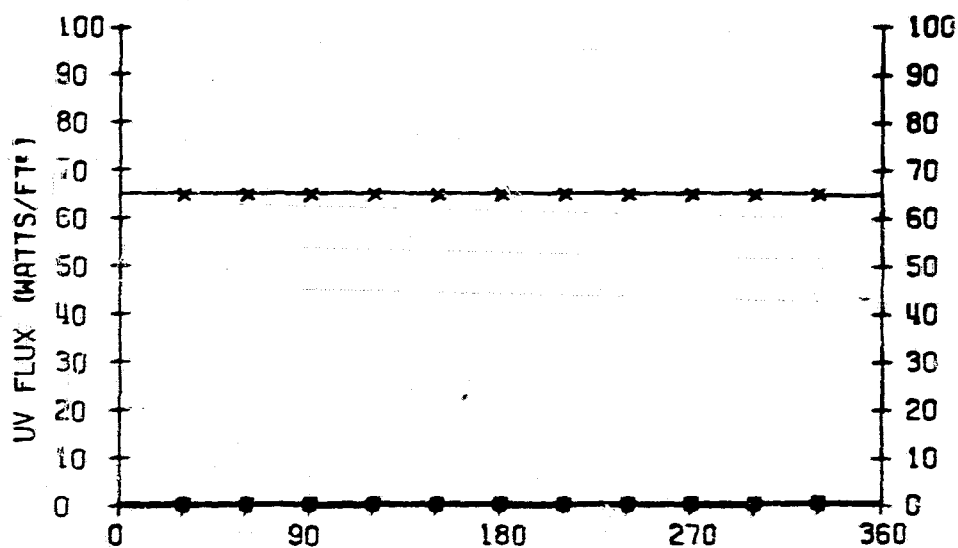
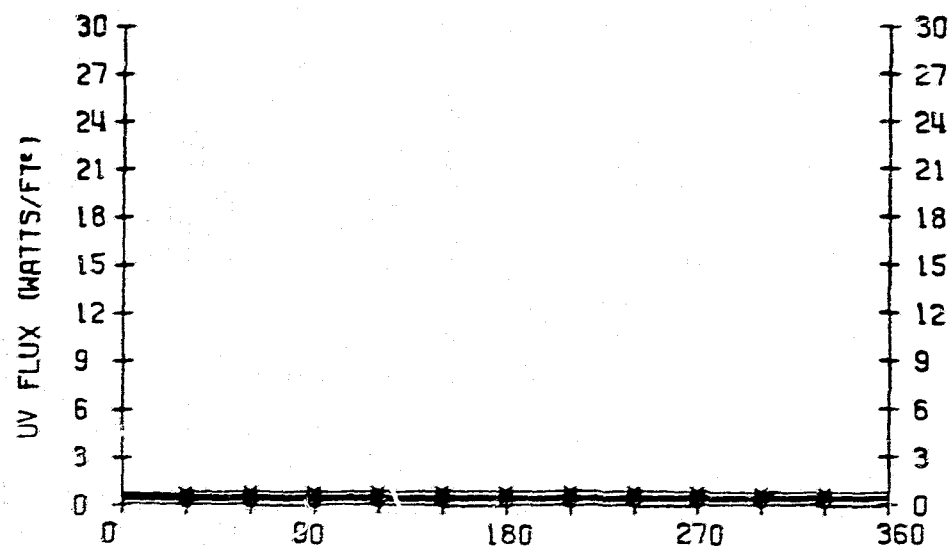
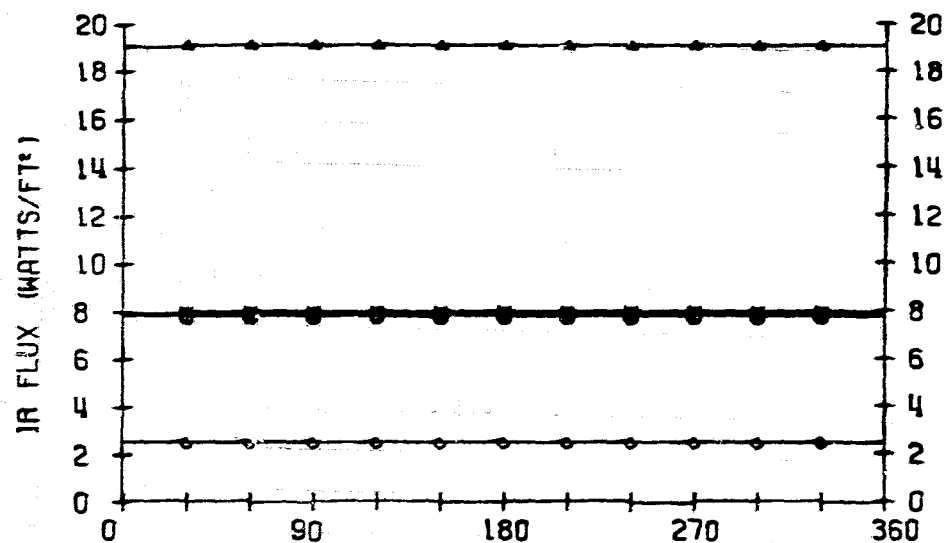
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	8.0	7.9	7.7	6.8	4.2	2.4
R	+Y (○)	8.2	7.8	7.6	5.9	6.9	4.5
F	+Z (△)	19.0	19.0	19.0	16.7	17.5	12.8
L	-X (+)	8.0	7.9	7.8	7.0	7.7	6.9
U	-Y (X)	8.2	8.0	7.6	5.9	6.9	4.5
X	-Z (◇)	2.6	2.4	2.3	3.0	1.9	2.2
U	+X (□)	0.4	0.4	0.3	0.3	0.3	0.2
V	+Y (○)	0.3	0.3	0.2	0.3	0.2	0.3
F	+Z (△)	0.5	0.5	0.5	0.4	0.5	0.3
L	-X (+)	0.4	0.4	0.4	0.3	0.3	0.3
U	-Y (X)	0.8	64.9	125.1	0.3	125.1	0.3
X	-Z (◇)	0.2	0.4	0.3	0.2	0.2	0.2

250 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1



LOCATION 2



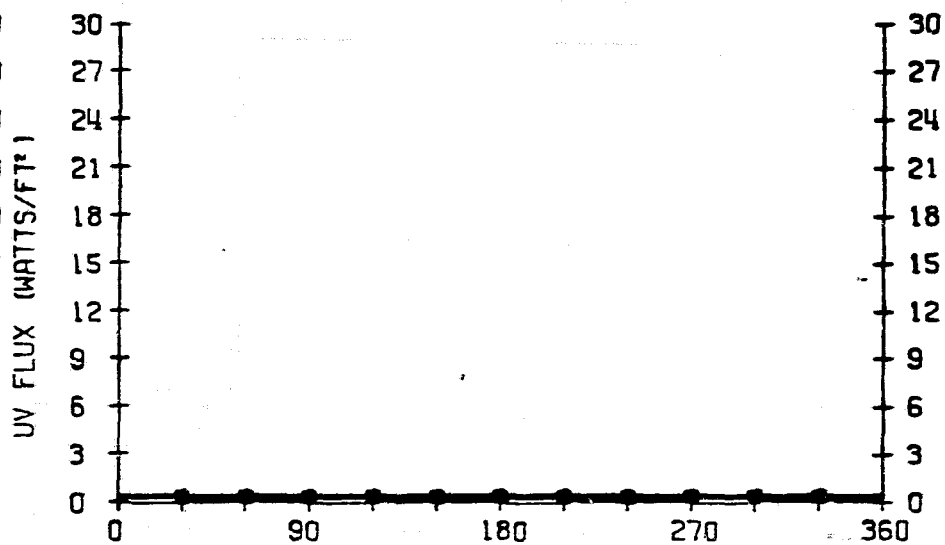
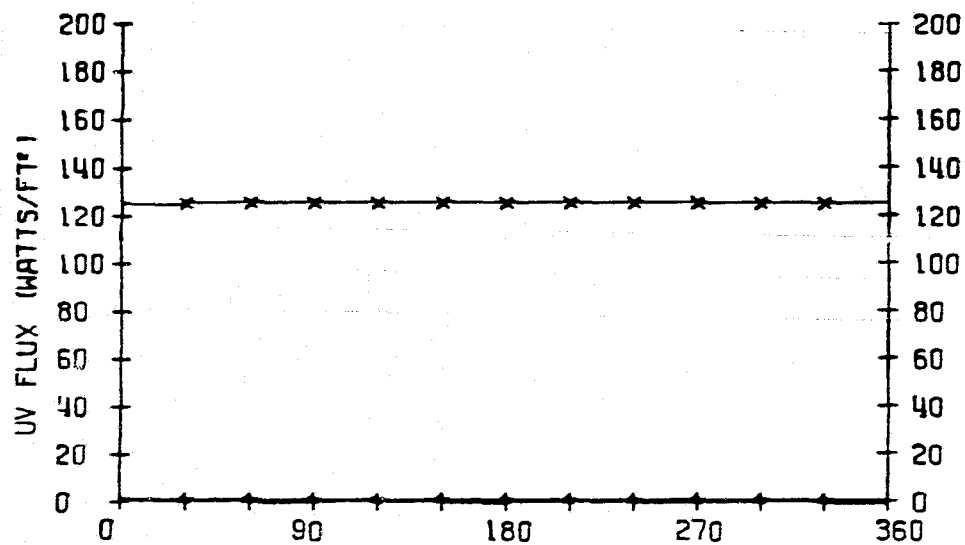
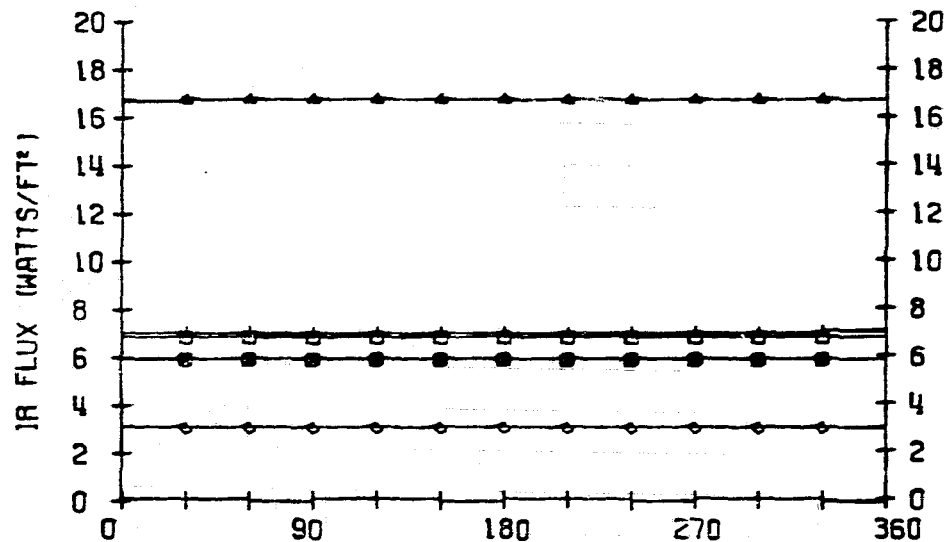
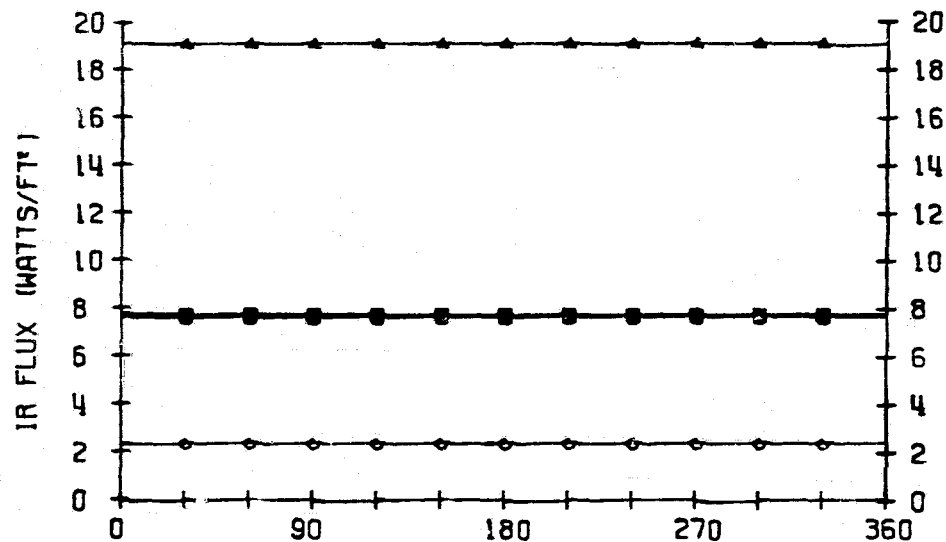
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

250 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3

LOCATION 4

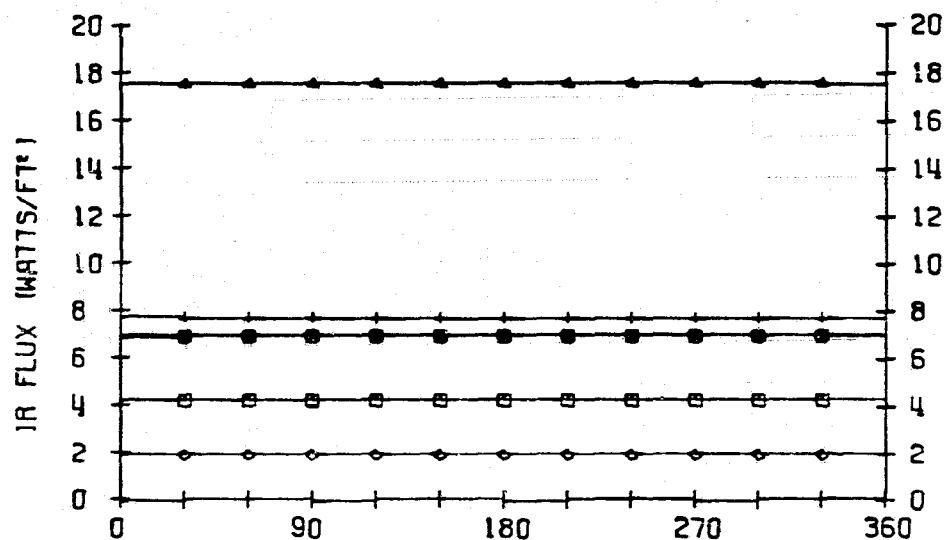


ORBIT POSITION (DEG)

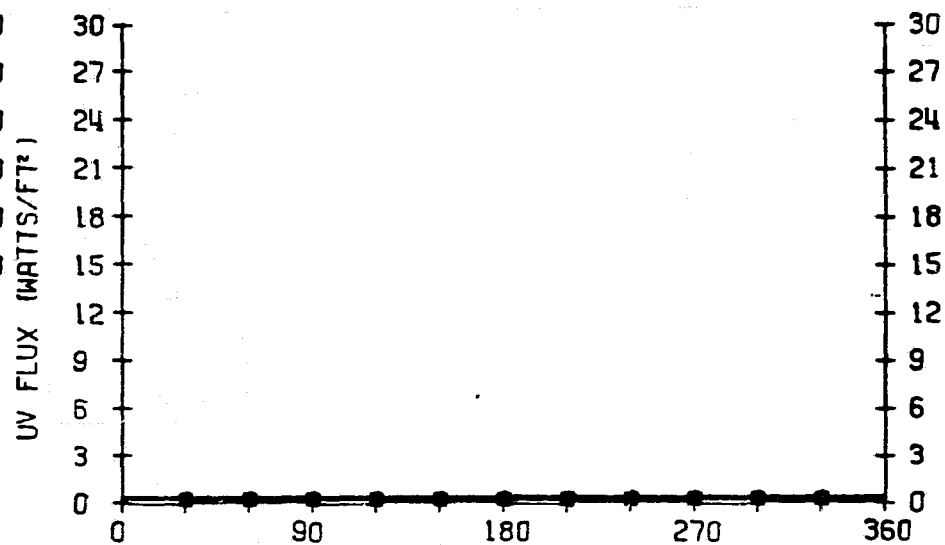
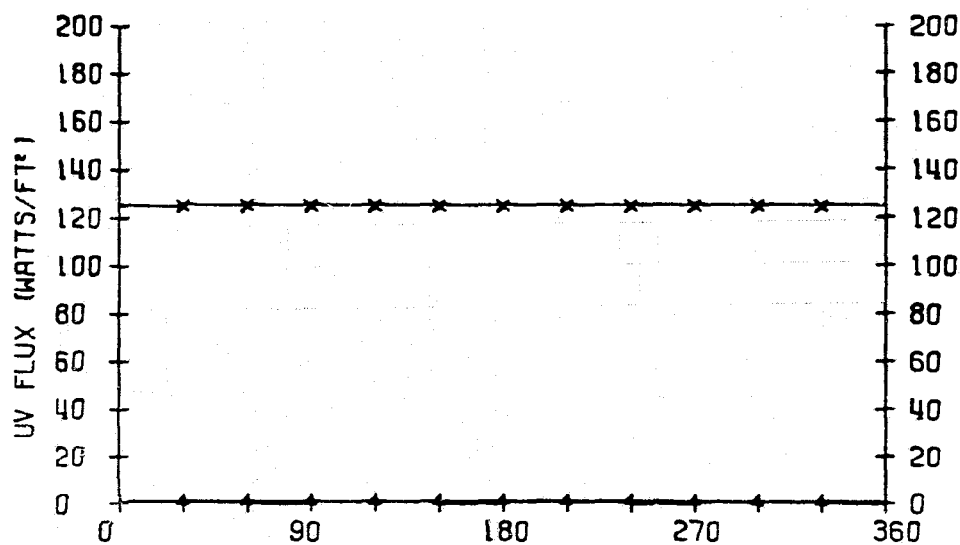
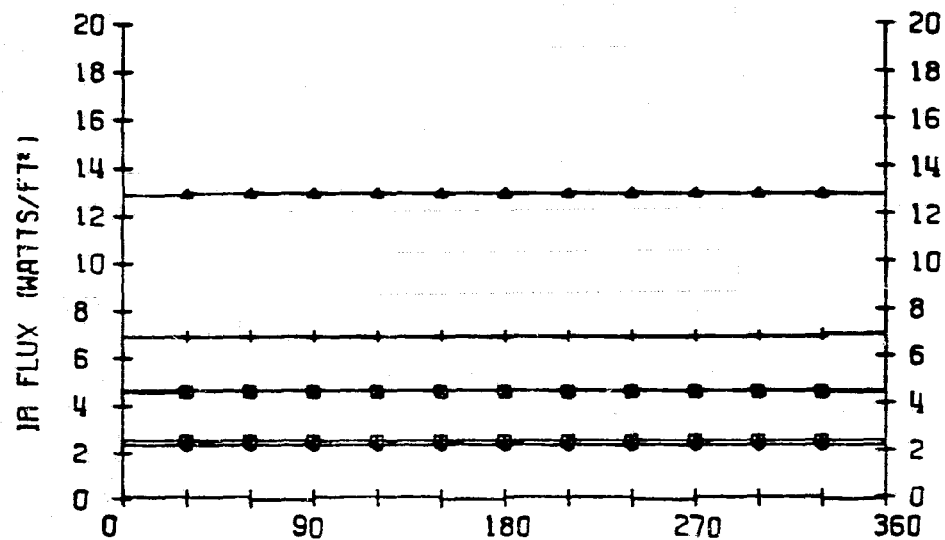
ORBIT POSITION (DEG)

250 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=50 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	10.1	8.9	7.1	12.8	11.2	14.9
R	+Y (○)	10.2	8.5	5.8	14.1	6.6	14.0
F	+Z (△)	0.2	0.2	0.1	2.7	1.4	5.5
L	-X (+)	9.8	8.9	7.8	12.3	7.0	11.9
U	-Y (X)	10.2	8.3	6.1	14.1	6.6	14.1
X	-Z (◇)	16.7	17.0	15.8	16.0	15.6	17.0

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

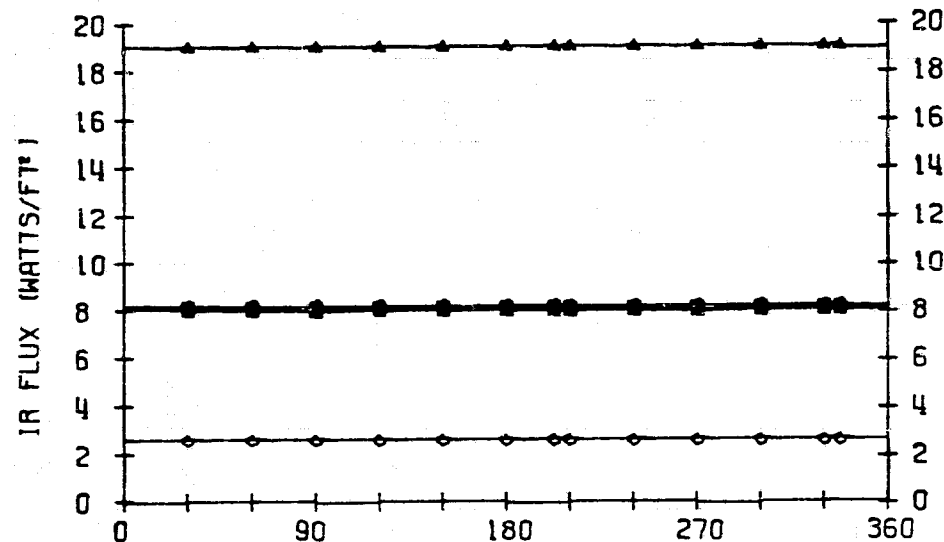
FOR

250 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

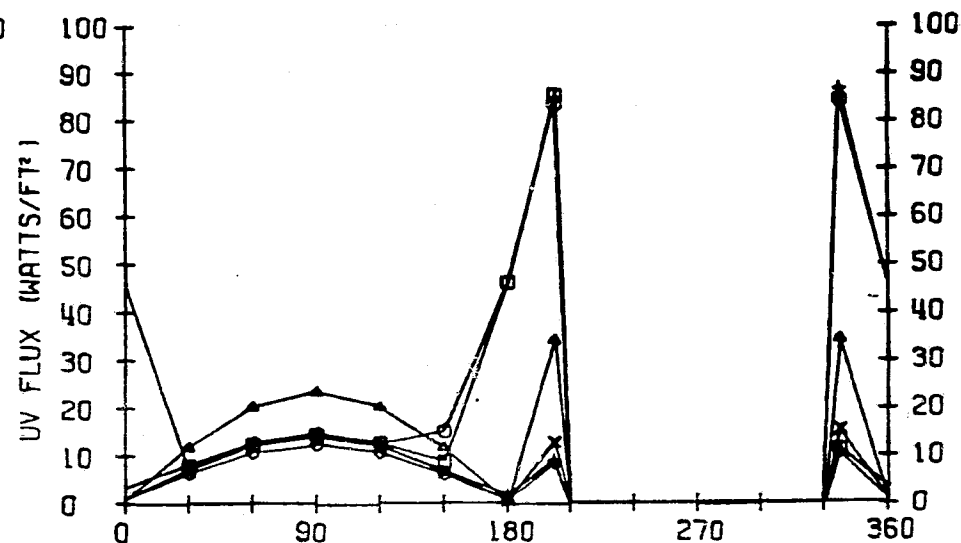
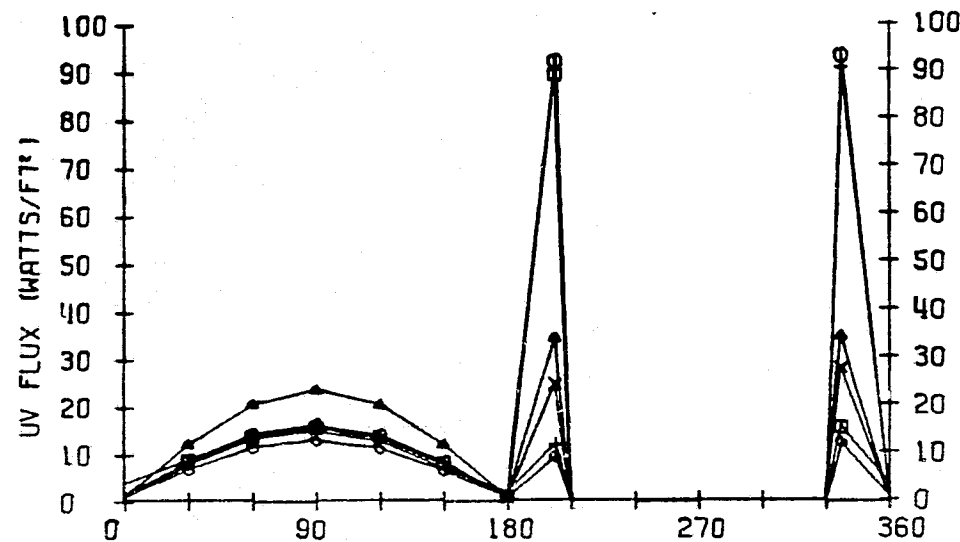
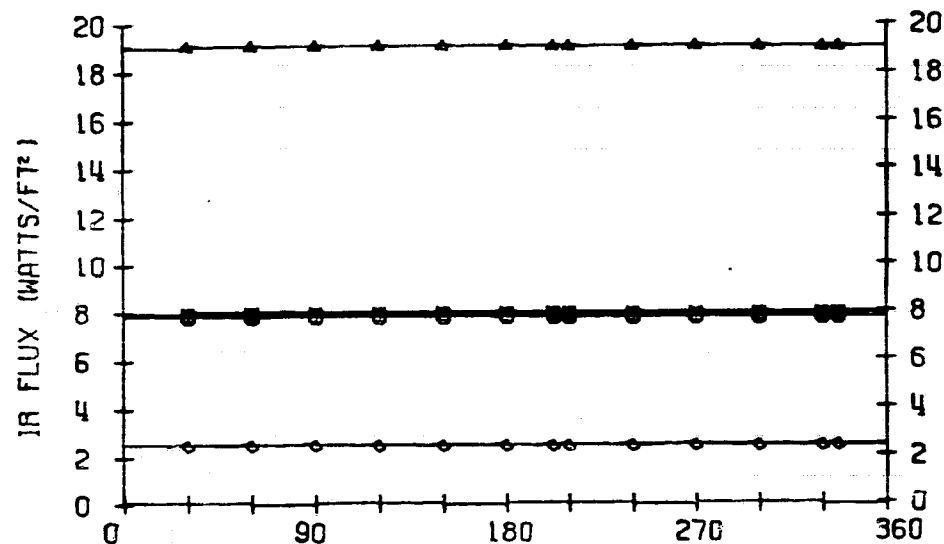
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	8.0	7.9	7.8	6.8	4.2	2.4
R	+Y (○)	8.2	7.8	7.6	5.9	7.0	4.6
F	+Z (△)	19.0	19.0	19.0	16.7	17.5	12.9
L	-X (+)	8.1	7.9	7.8	7.1	7.8	7.0
U	-Y (X)	8.2	8.0	7.7	5.9	7.8	4.6
X	-Z (◇)	2.6	2.4	2.3	3.0	1.9	2.2
U	+X (□)	8.6	11.4	15.9	6.1	9.4	5.2
V	+Y (○)	11.0	17.2	25.7	5.4	18.8	5.2
F	+Z (△)	9.6	9.5	9.5	7.5	9.2	7.5
L	-X (+)	8.2	11.0	14.1	5.8	15.6	5.7
U	-Y (X)	6.5	5.3	5.0	6.2	5.4	5.6
X	-Z (◇)	4.2	4.5	4.9	4.9	4.9	4.6

250 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1



LOCATION 2



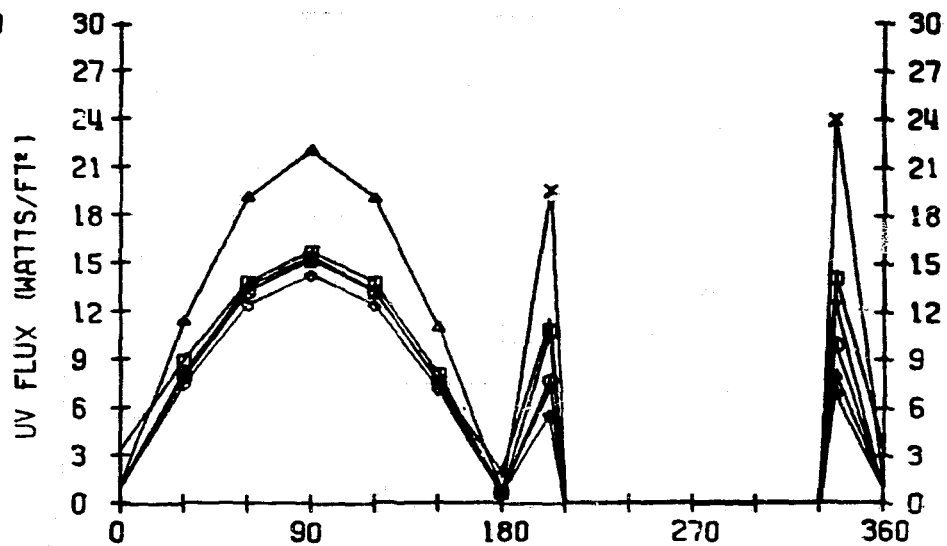
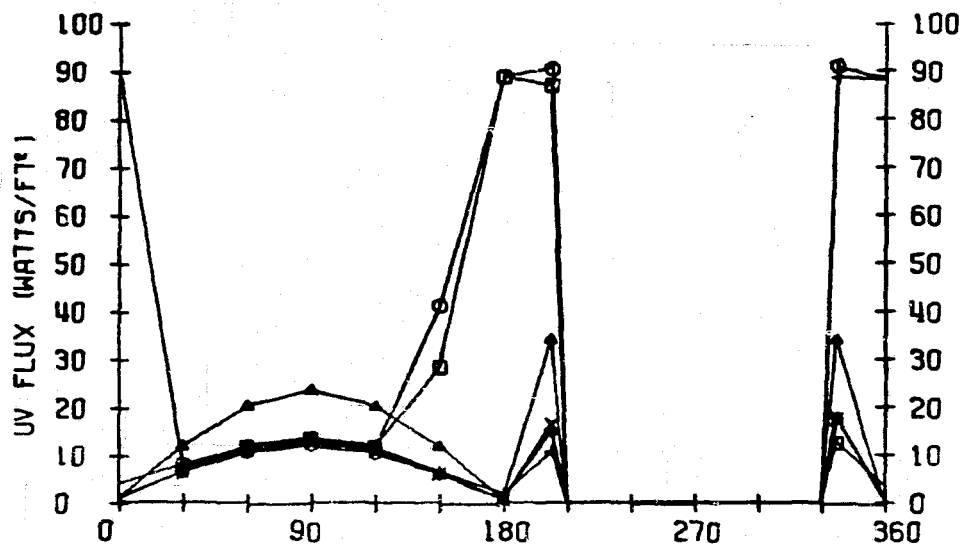
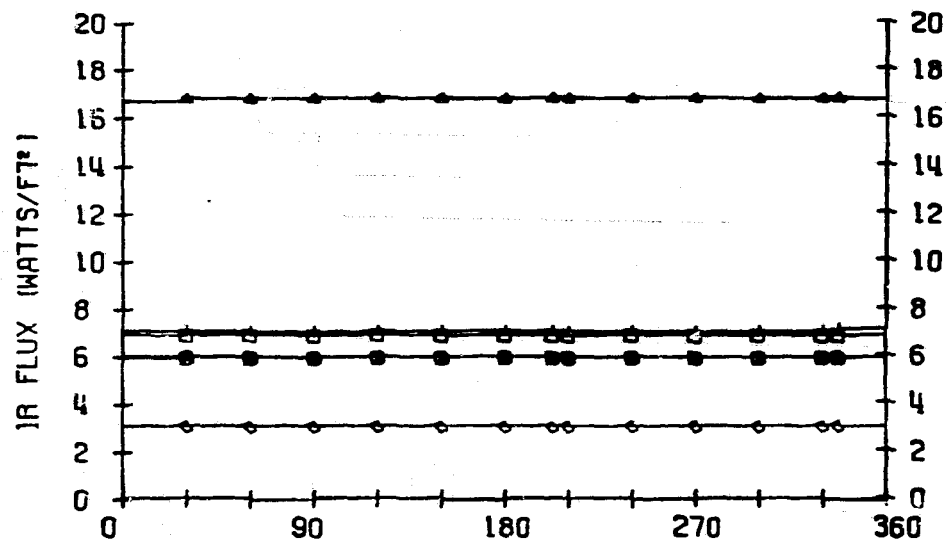
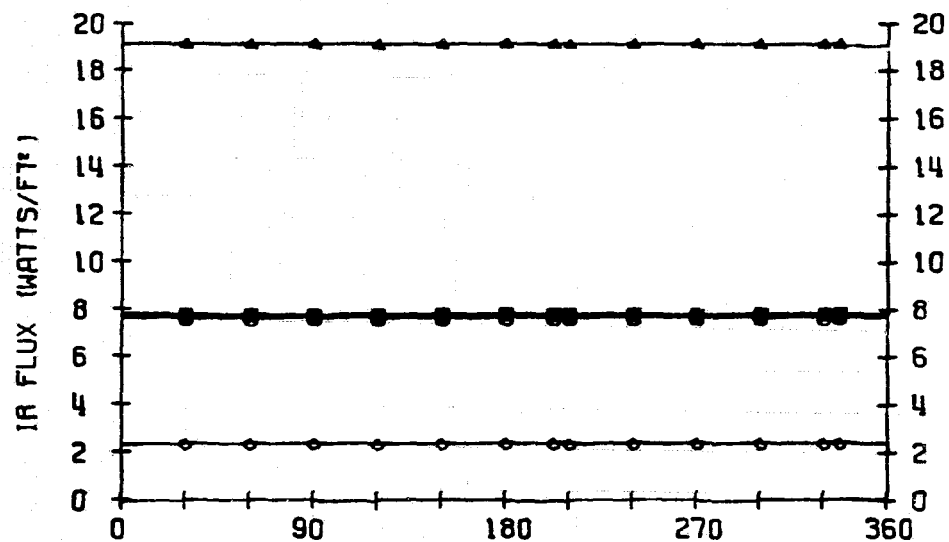
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

250 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3

LOCATION 4

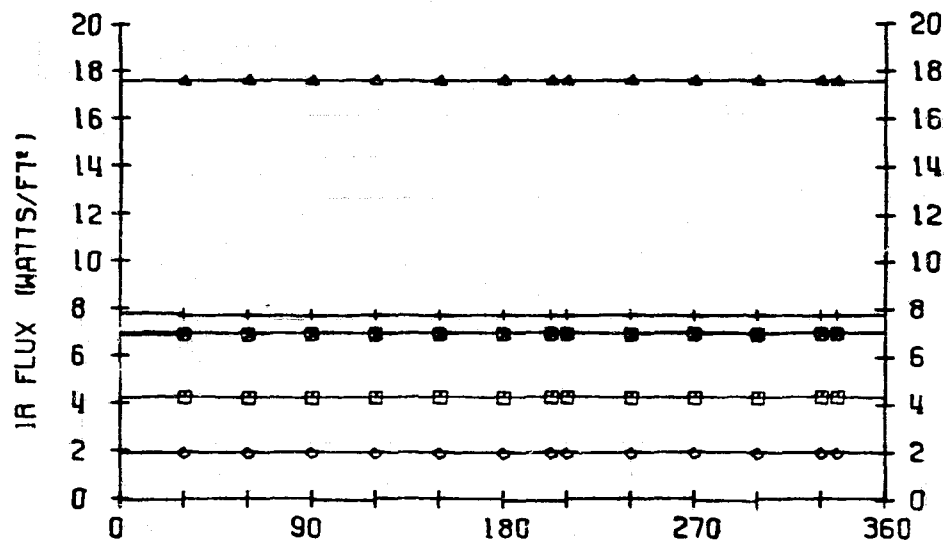


ORBIT POSITION (DEG)

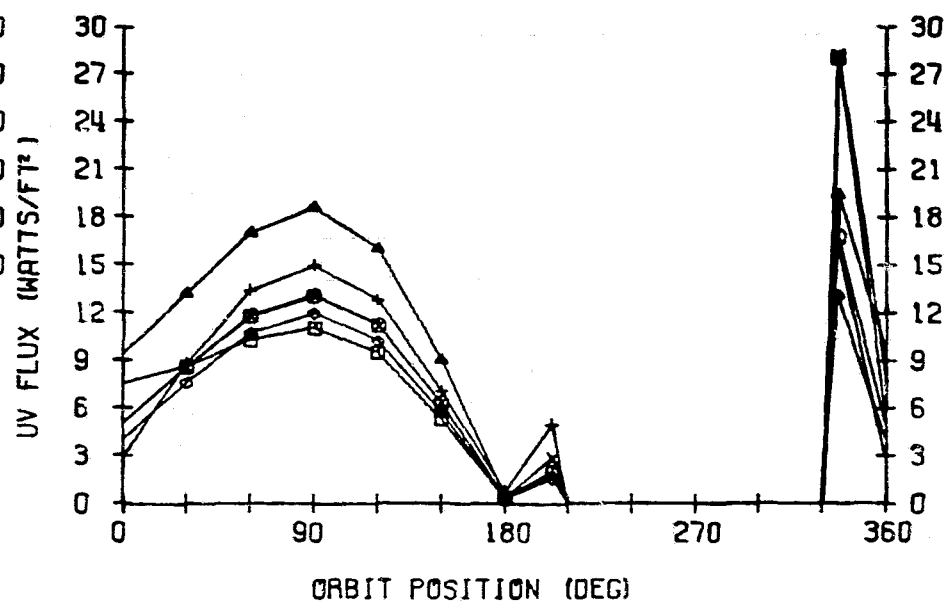
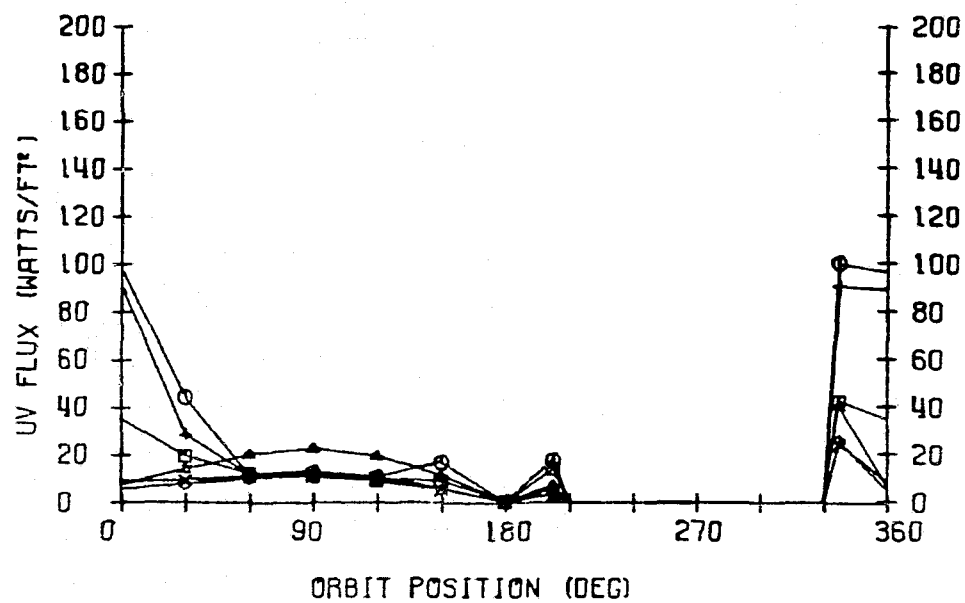
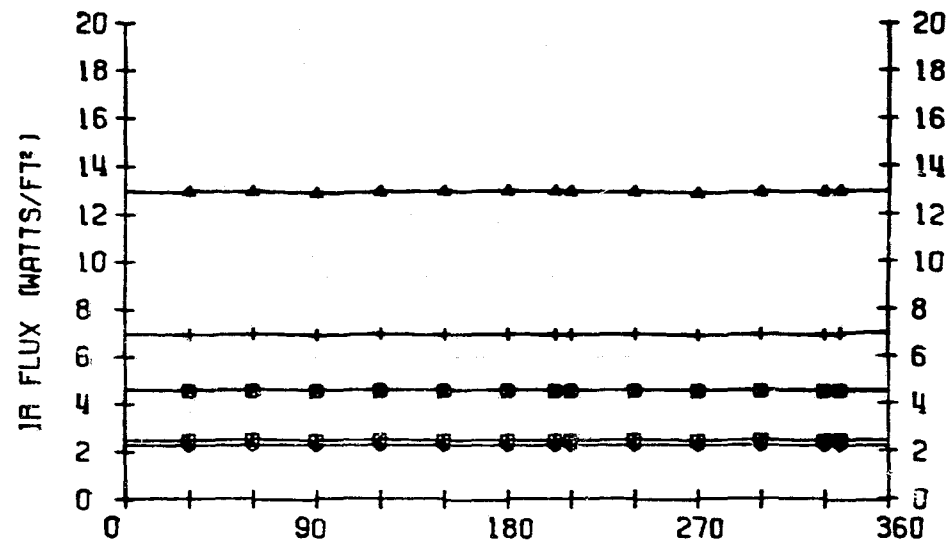
ORBIT POSITION (DEG)

250 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	13.0	11.5	9.3	16.3	16.5	20.9
R	+Y (○)	12.8	10.7	7.3	17.5	9.0	14.4
F	+Z (△)	0.3	0.2	0.2	3.6	2.1	7.2
L	-X (+)	12.7	11.5	10.0	15.6	9.0	15.7
U	-Y (X)	13.4	10.7	7.9	17.9	9.3	19.0
X	-Z (◇)	20.4	21.4	20.1	22.0	21.1	22.5

FLUX DATA

FOR

ALTITUDE - 250 km

ORIENTATION NO. 8a

Passive thermal control (PTC), bay towards sun at true anomaly = 0°

Beta angles - 0° , 45° , 90°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

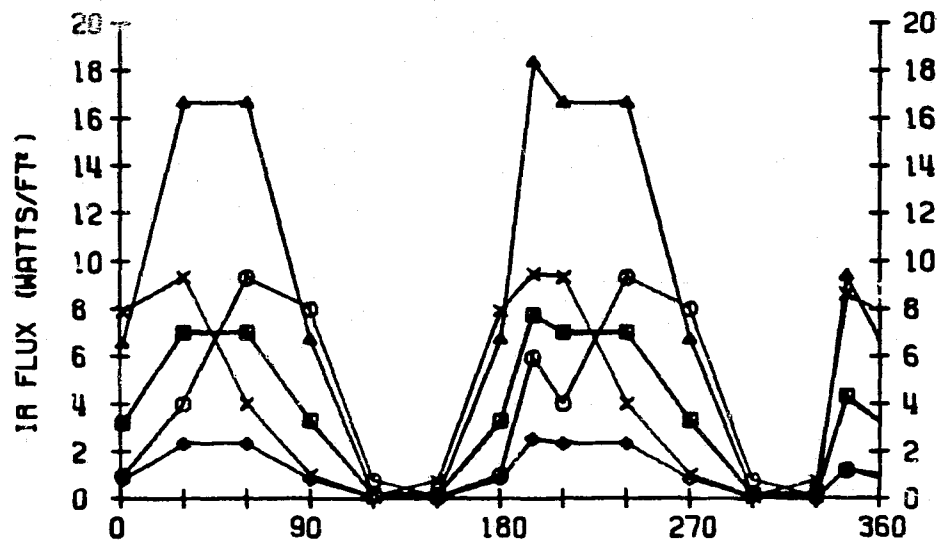
FOR

250 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

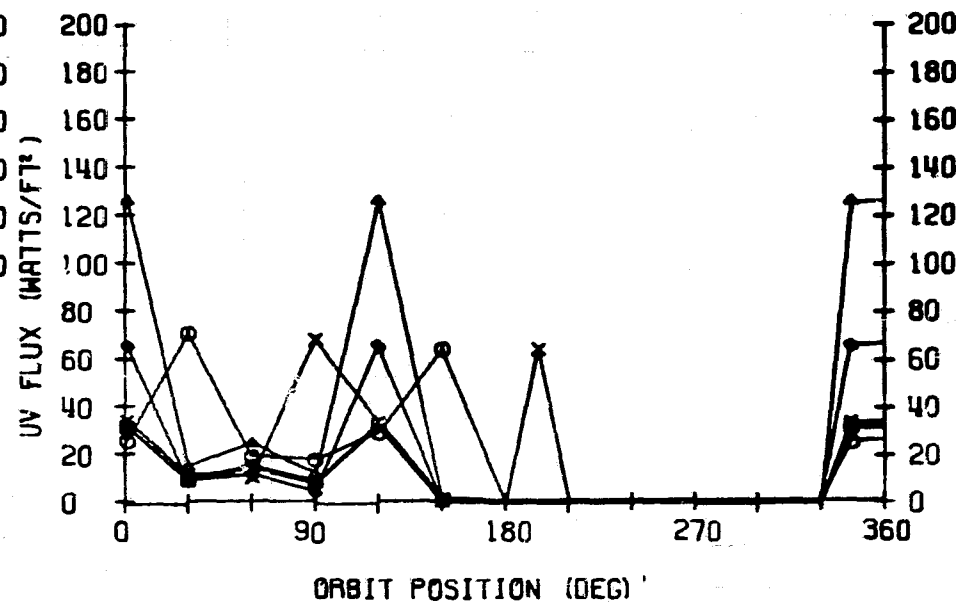
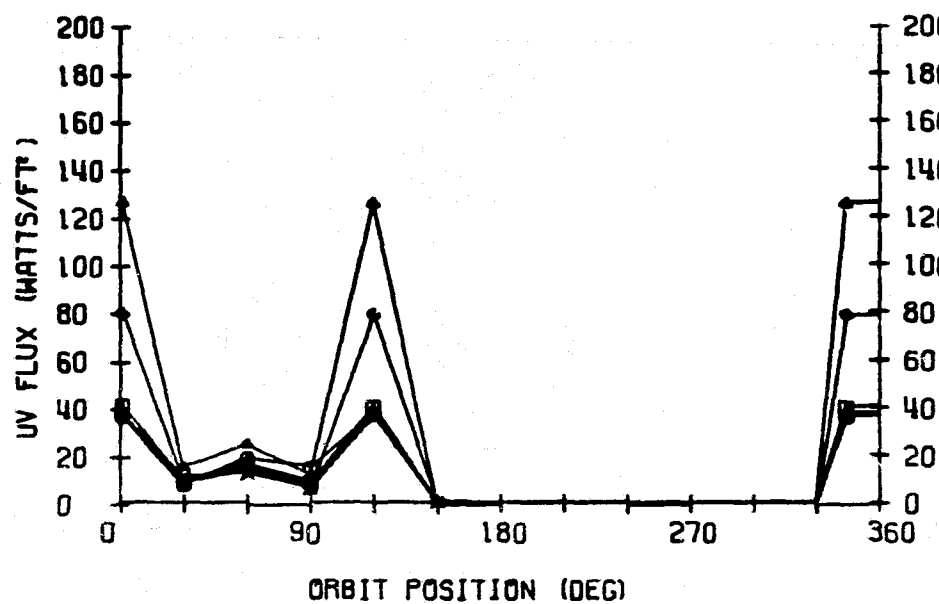
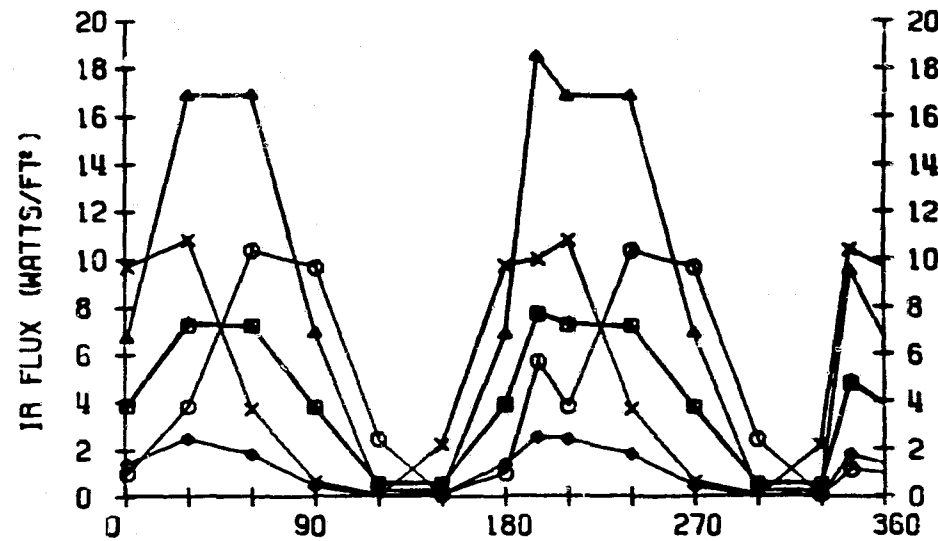
	SURFACE DIRECTION	LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
I	+X (□)	3.5	3.9	4.5	2.7	2.3	1.0
R	+Y (○)	3.9	4.6	5.8	2.5	5.3	2.0
F	+Z (Δ)	7.8	8.0	8.0	6.8	7.4	5.4
L	-X (+)	3.5	3.9	4.4	2.8	4.6	2.7
U	-Y (x)	3.9	4.5	5.8	2.5	5.3	2.0
X	-Z (◇)	1.1	1.0	1.2	1.2	1.0	0.9
U	+X (□)	9.9	8.3	7.8	12.0	6.1	11.6
V	+Y (○)	9.8	18.9	29.1	13.0	28.6	13.1
F	+Z (Δ)	25.7	25.7	25.7	26.6	25.8	26.9
L	-X (+)	9.3	8.3	8.4	11.7	8.2	12.6
U	-Y (x)	8.8	14.9	19.3	12.9	18.8	13.0
X	-Z (◇)	15.8	13.2	13.7	18.7	13.2	18.9

250 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 1

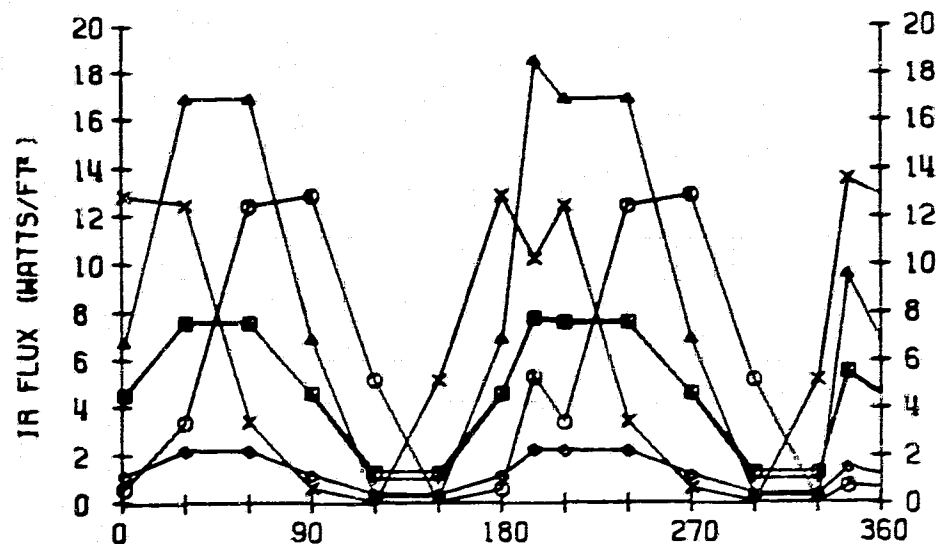


LOCATION 2

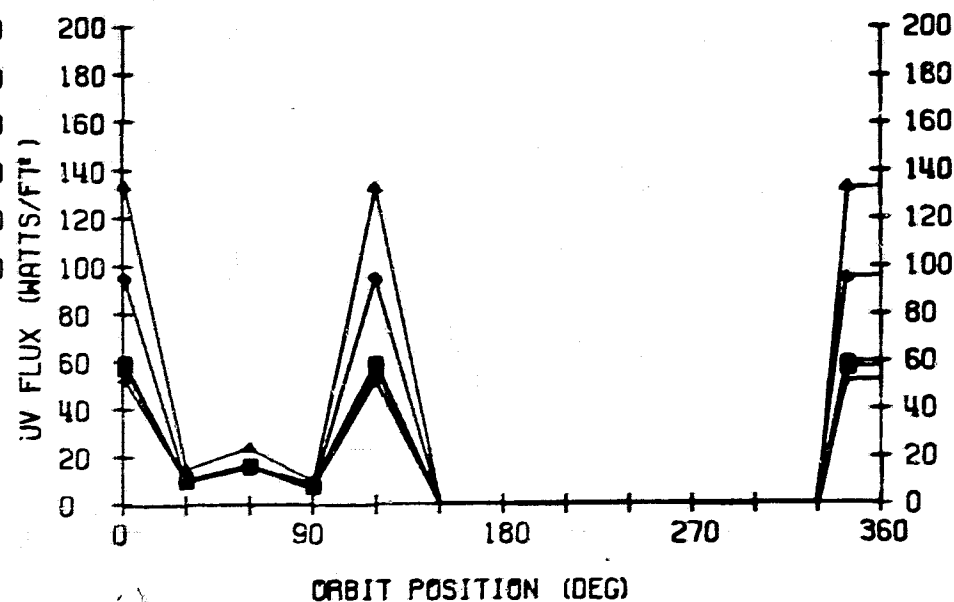
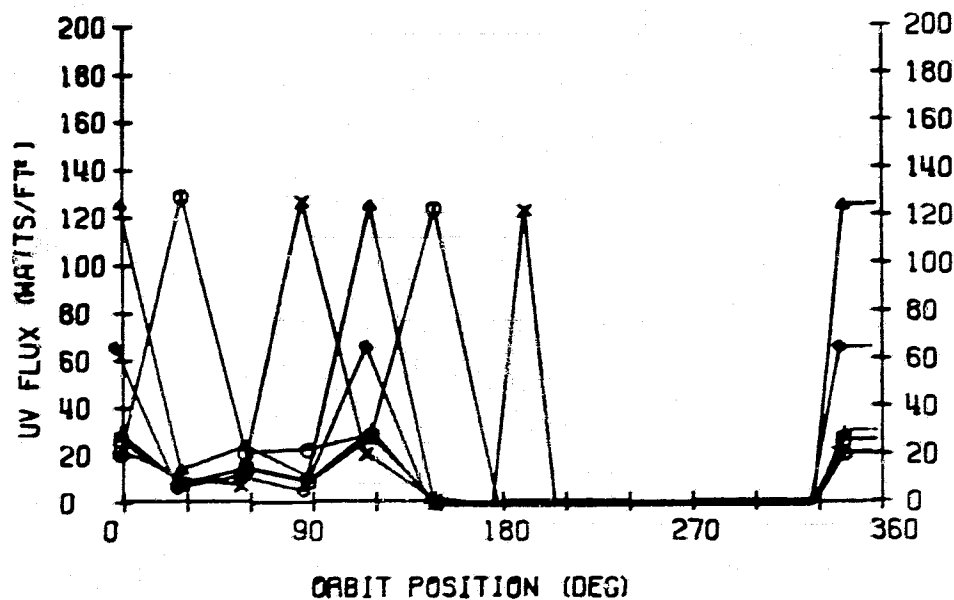
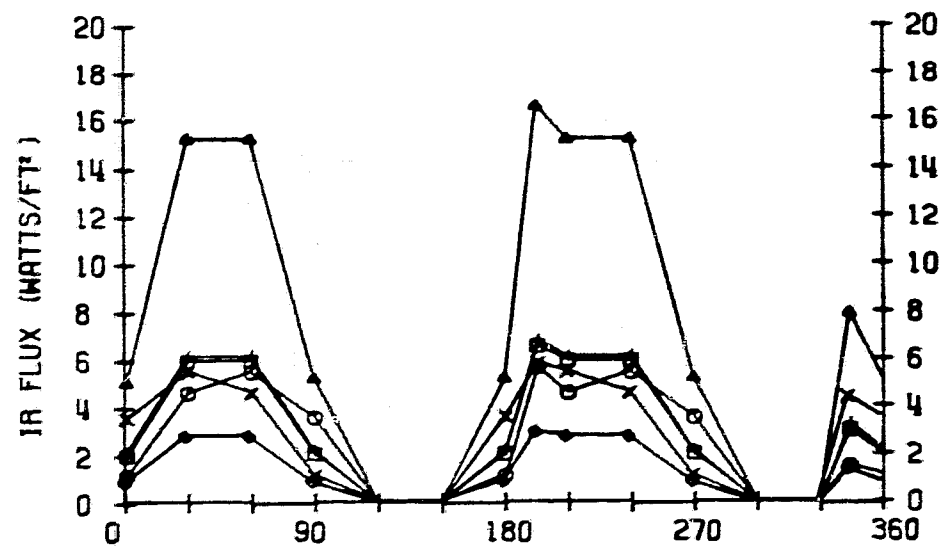


250 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 3

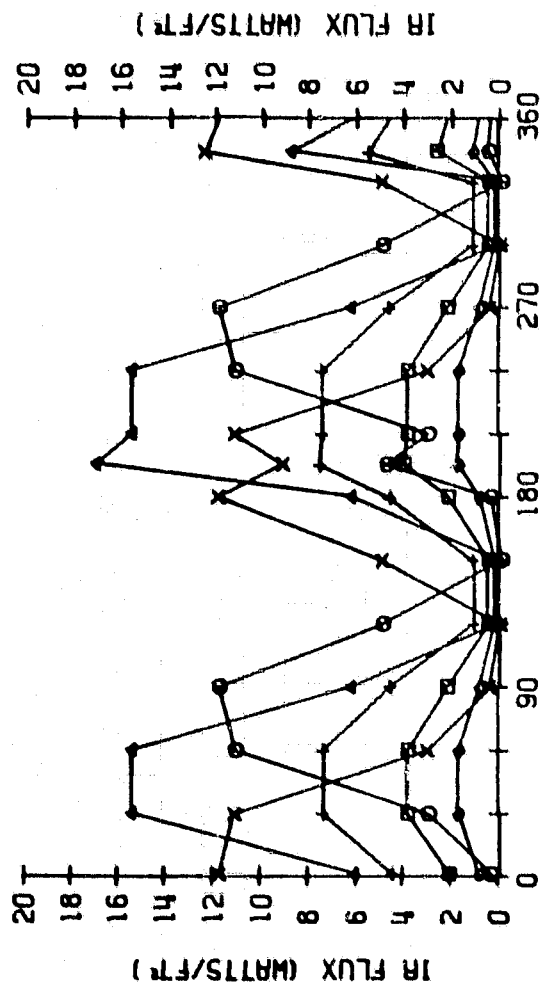


LOCATION 4

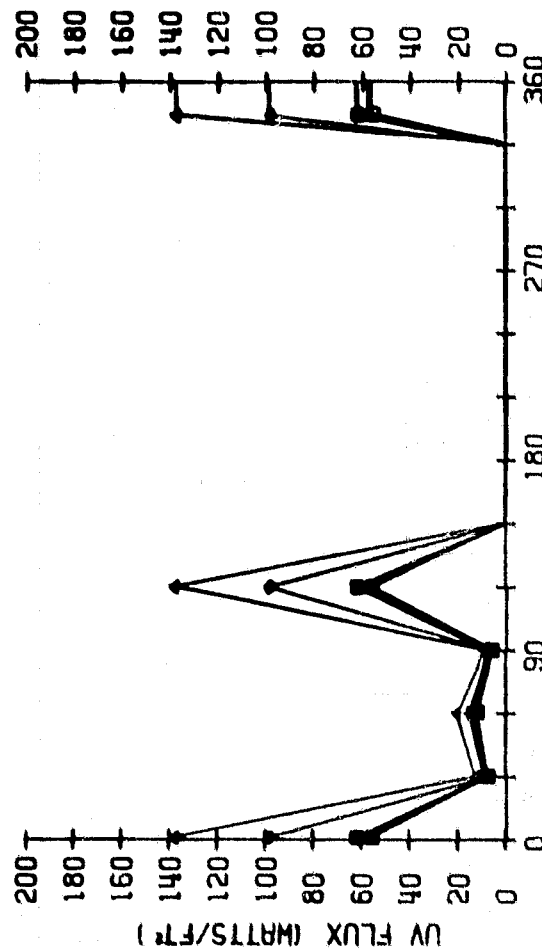
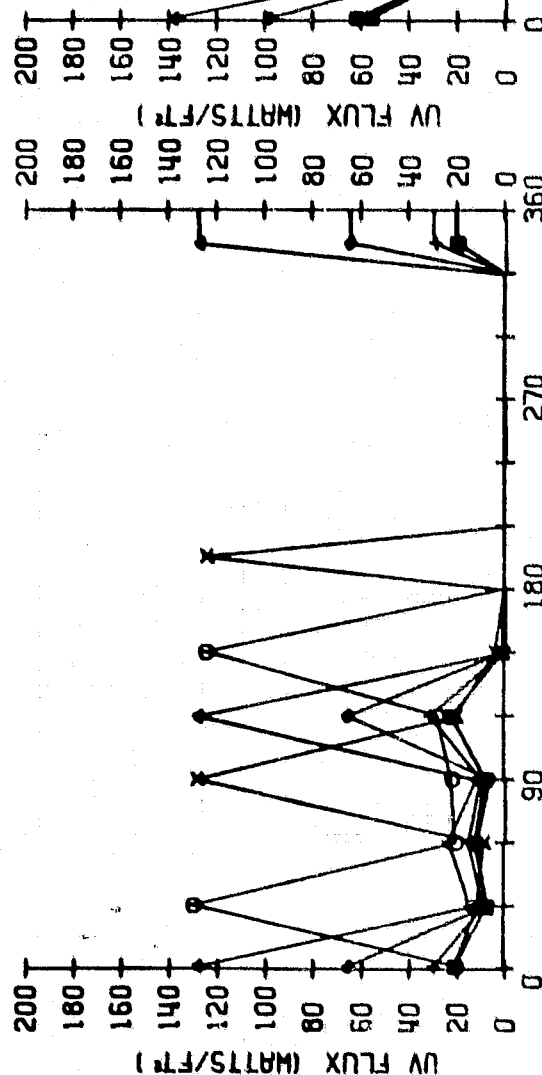
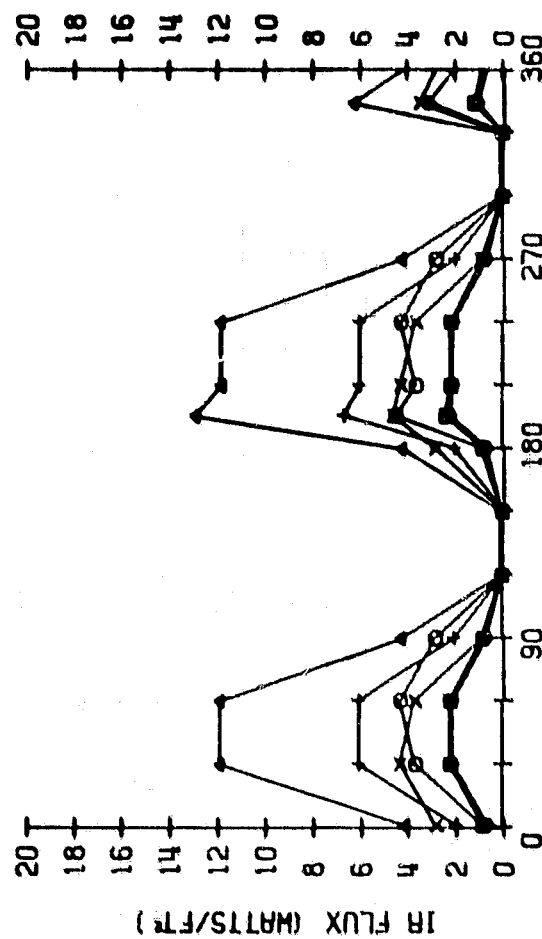


250 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	12.1	10.5	8.5	15.5	13.4	19.1
R	+Y (○)	11.9	9.5	6.5	16.7	8.0	18.4
F	+Z (△)	0.3	0.2	0.1	3.1	1.6	6.5
L	-X (+)	12.0	10.6	9.3	15.0	8.3	15.8
U	-Y (x)	11.9	10.0	6.3	16.8	8.1	18.6
X	-Z (◇)	20.3	20.1	19.0	22.3	20.1	24.1

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

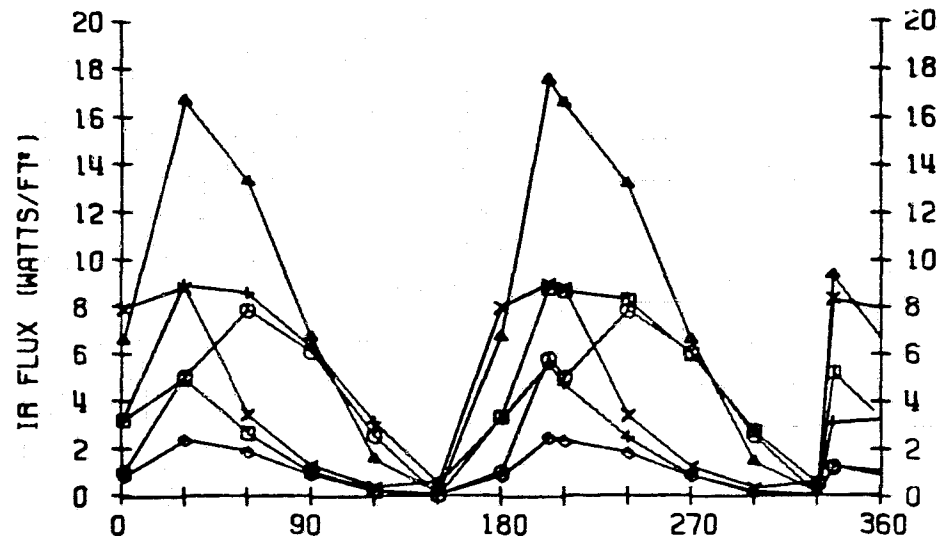
FOR

250 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

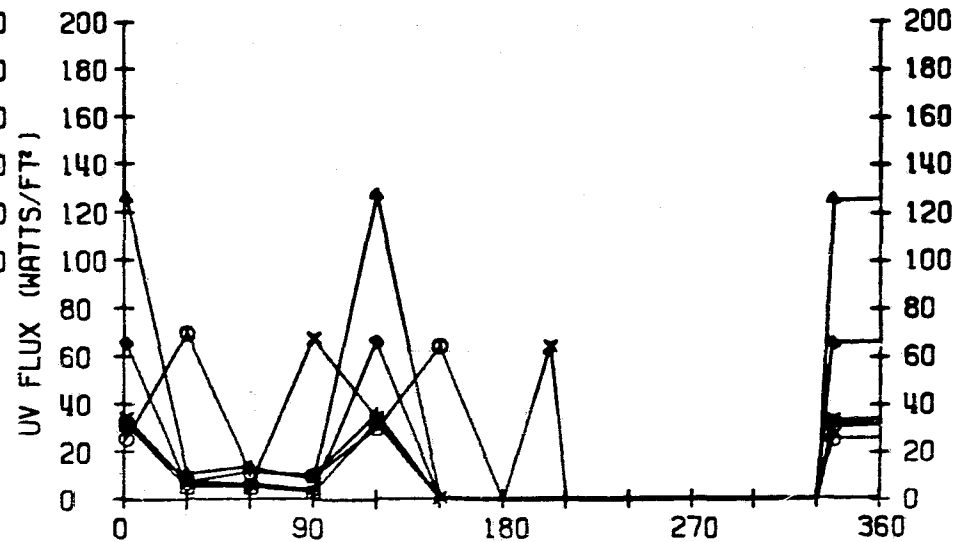
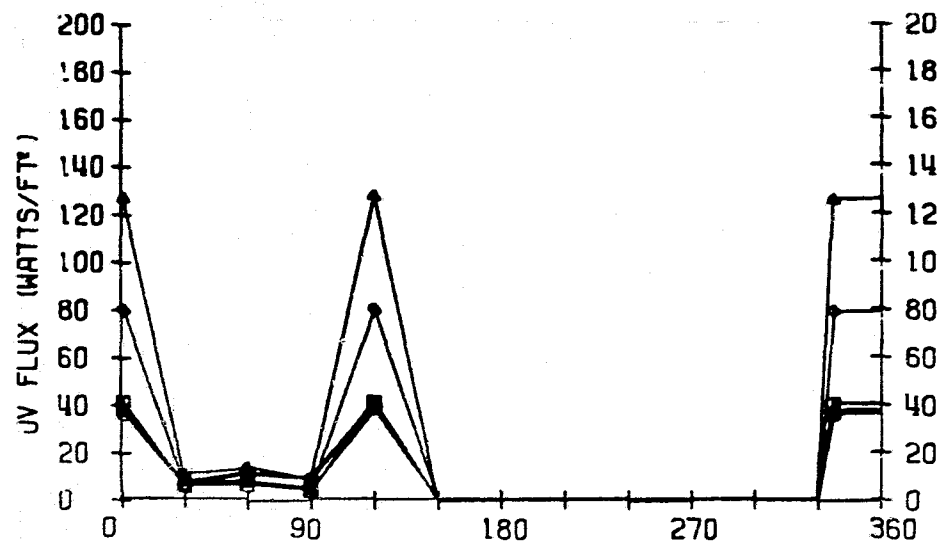
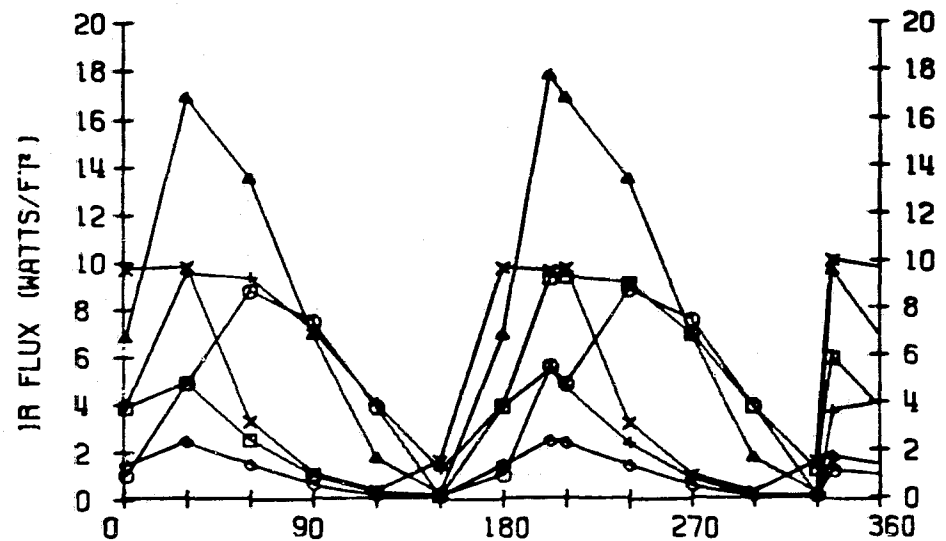
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.5	3.9	4.4	2.5	2.2	1.0
F	+Y (○)	3.5	4.2	5.4	2.3	5.1	1.9
F	+Z (Δ)	7.5	7.6	7.6	6.4	7.0	5.1
L	-X (+)	3.5	4.0	4.6	2.8	4.8	2.8
U	-Y (X)	3.7	4.3	5.4	2.3	4.9	1.8
X	-Z (◇)	1.0	1.0	1.2	1.1	1.0	0.9
U	+X (□)	9.1	7.2	6.4	12.4	6.2	12.5
V	+Y (○)	9.3	18.0	27.8	13.2	27.9	13.9
F	+Z (Δ)	26.7	26.7	26.6	27.3	27.2	29.0
L	-X (+)	9.9	9.0	9.3	12.4	9.3	13.7
U	-Y (X)	8.7	15.4	20.1	13.1	20.0	13.8
X	-Z (◇)	16.6	13.8	14.3	19.7	14.2	20.5

250 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 1



LOCATION 2

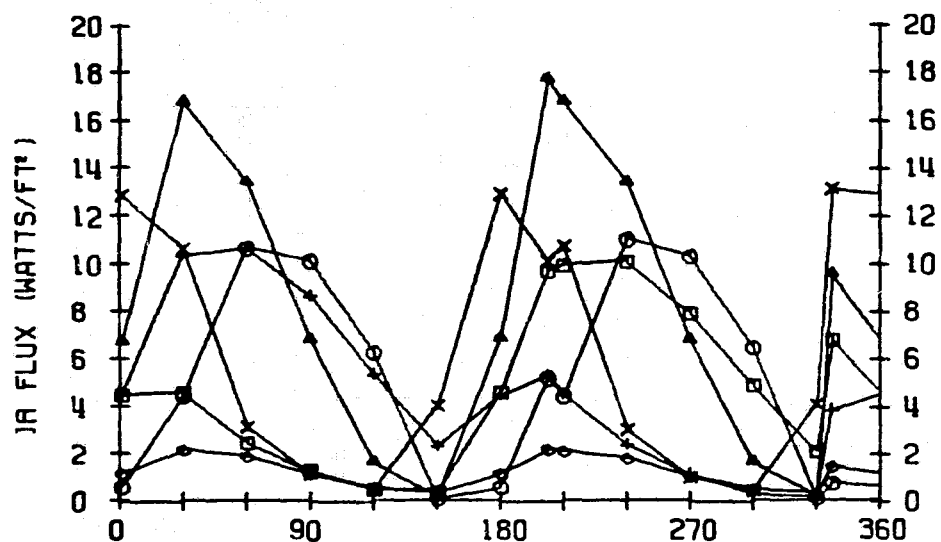


ORBIT POSITION (DEG)

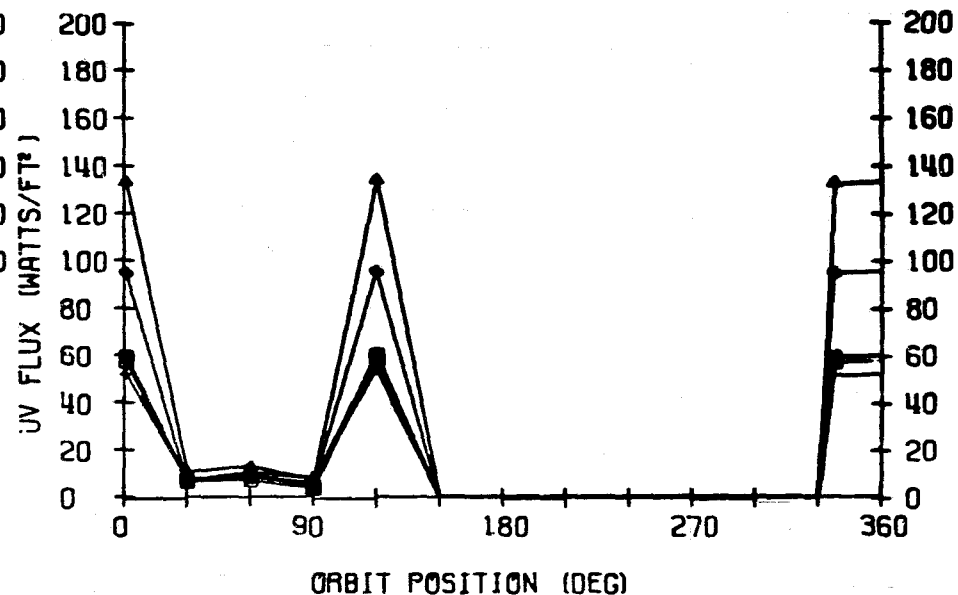
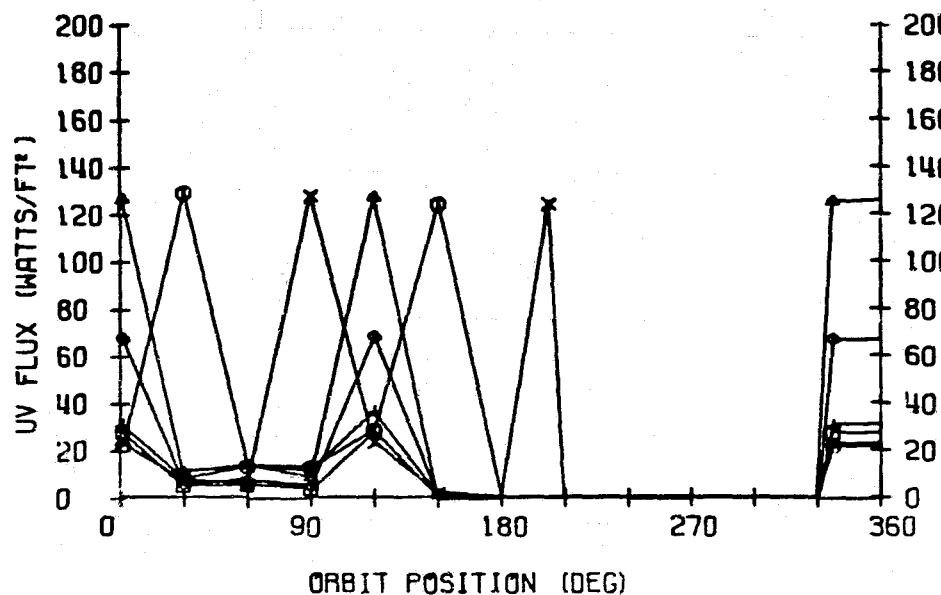
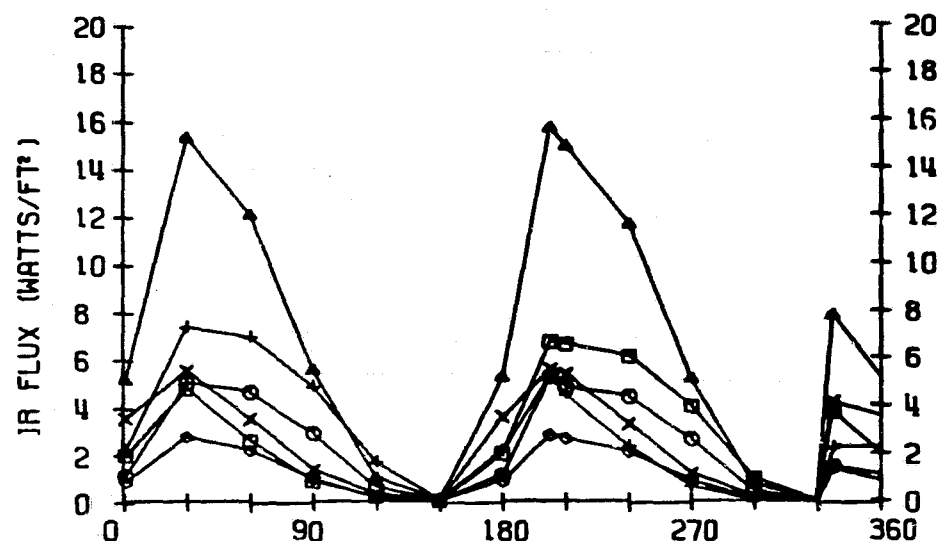
ORBIT POSITION (DEG)

250 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 3

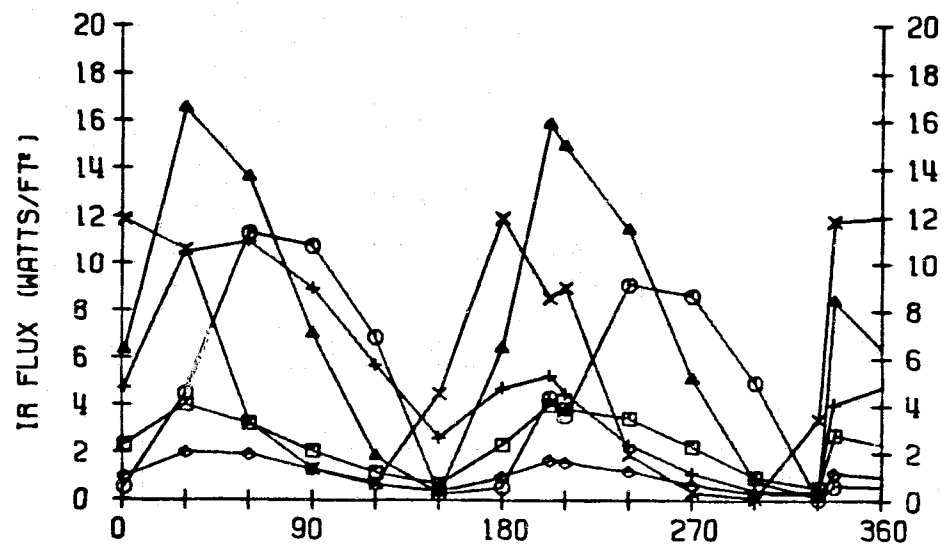


LOCATION 4

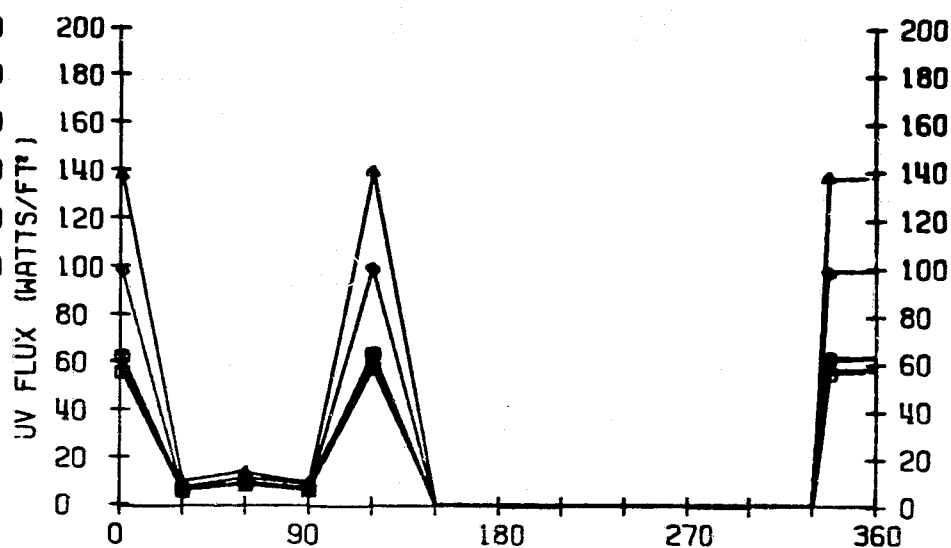
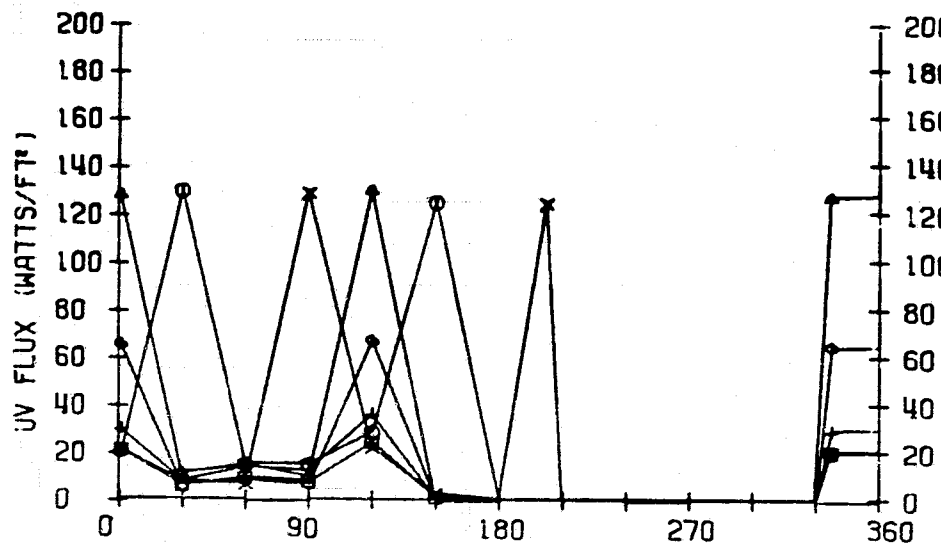
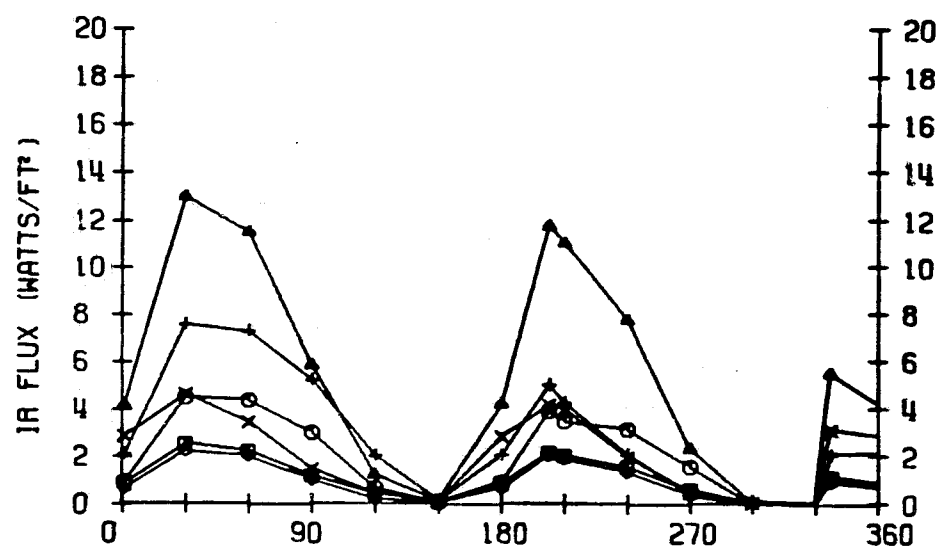


250 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	11.9	10.4	8.4	15.3	13.6	19.3
R	+Y (○)	11.6	9.3	6.4	16.4	8.0	18.5
F	+Z (△)	0.3	0.2	0.1	3.0	1.6	6.6
L	-X (+)	11.7	10.4	9.0	14.6	8.2	15.7
U	-Y (x)	11.6	9.7	6.6	16.3	3.1	18.6
X	-Z (◇)	19.9	19.7	18.6	21.7	20.1	24.1

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

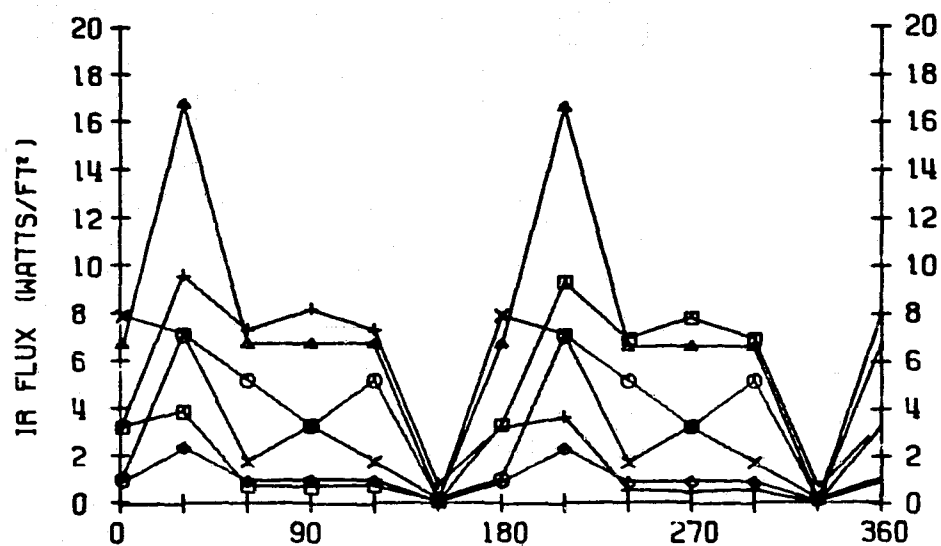
FOR

250 KM * BETA=00 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

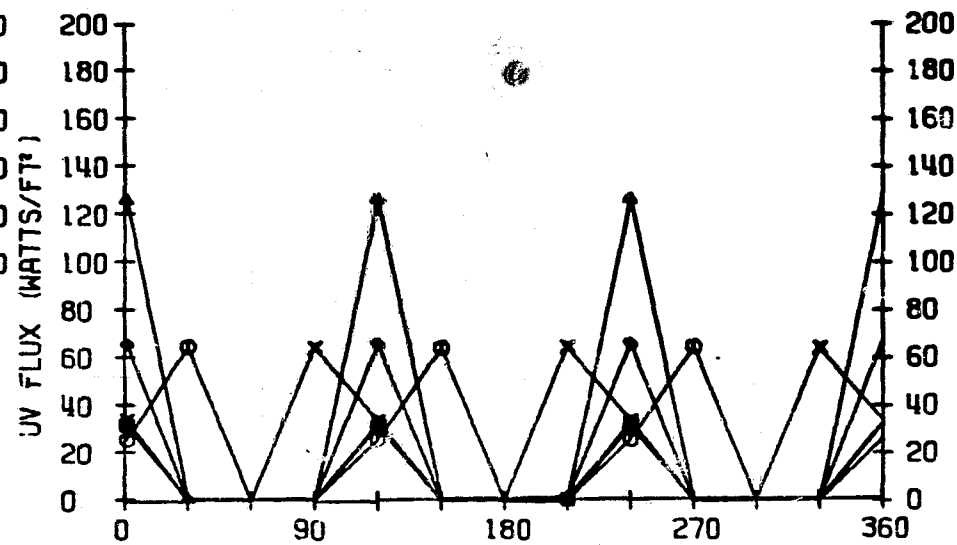
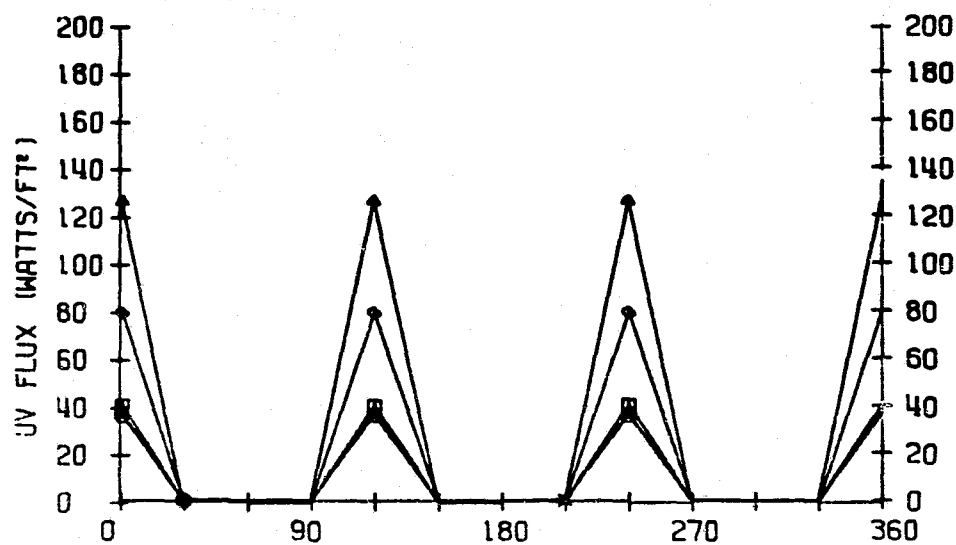
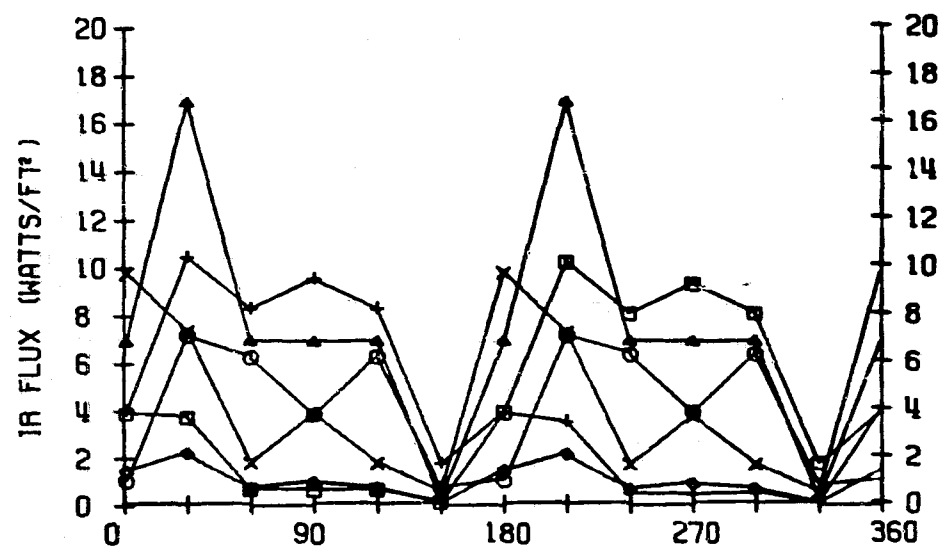
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.7	4.2	4.8	2.6	2.2	1.0
R	+Y (○)	3.6	4.2	5.2	2.2	4.3	1.8
F	+Z (△)	7.2	7.4	7.4	6.1	6.7	4.7
L	-X (+)	3.8	4.3	5.0	2.9	5.2	2.9
U	-Y (X)	3.7	4.1	5.1	2.3	4.5	1.8
X	-Z (◇)	1.0	0.9	1.1	1.1	0.9	0.8
U	+X (□)	10.4	8.1	7.0	14.5	5.3	14.1
V	+Y (○)	9.3	22.5	36.5	15.1	36.2	15.8
F	+Z (△)	31.9	31.8	31.8	33.6	32.2	34.7
L	-X (+)	9.6	8.1	7.8	13.3	7.6	14.7
U	-Y (X)	9.4	24.7	36.9	15.1	36.3	15.8
X	-Z (◇)	20.1	16.6	17.0	24.0	16.4	24.8

250 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 1



LOCATION 2

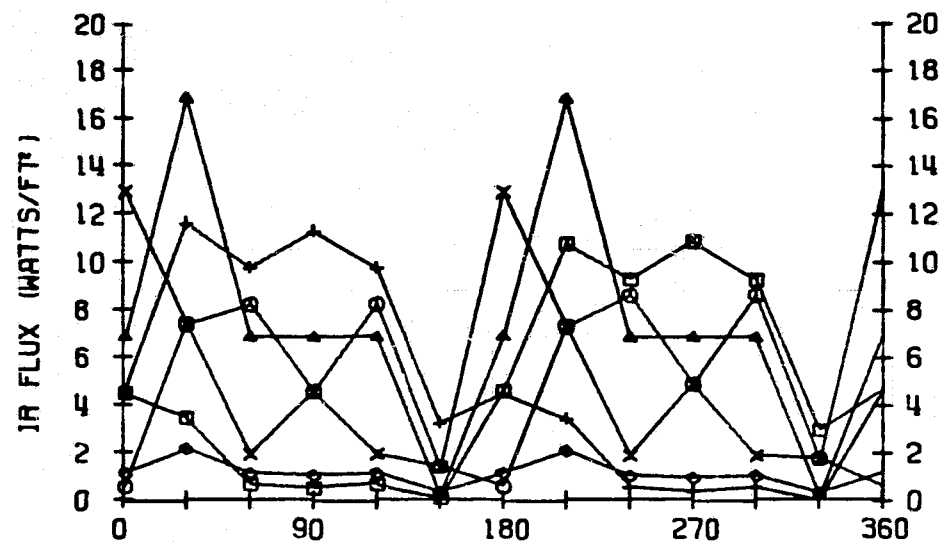


ORBIT POSITION (DEG)

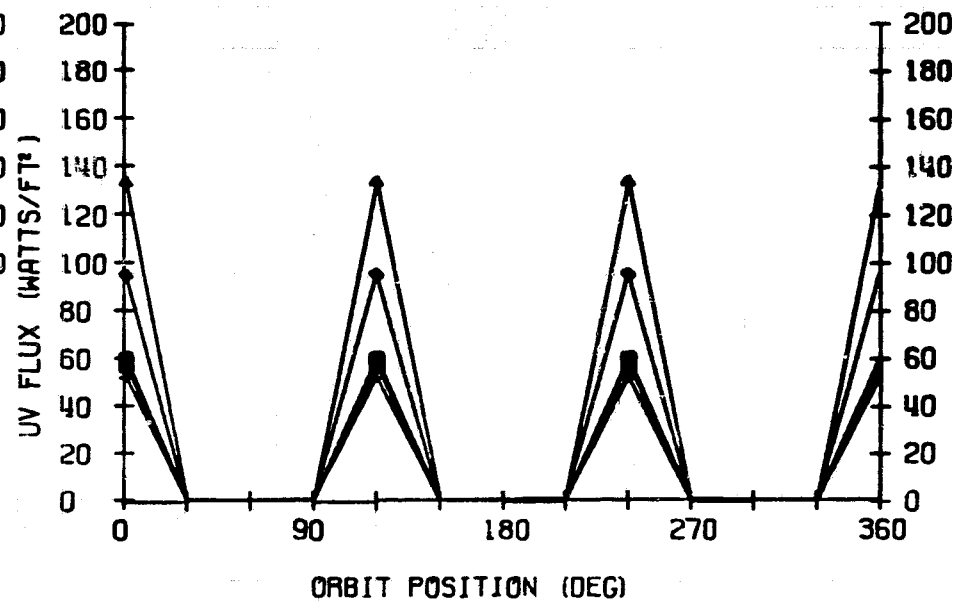
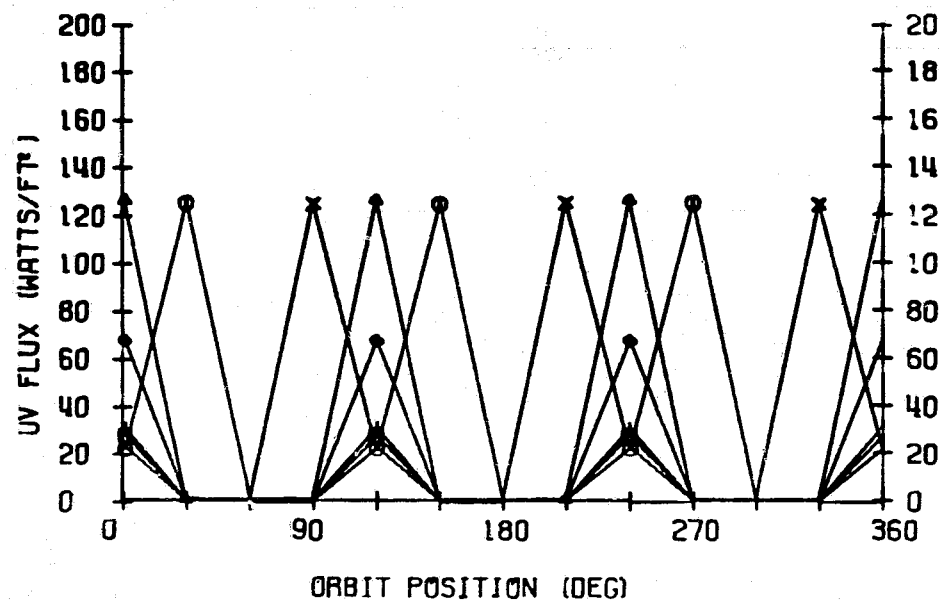
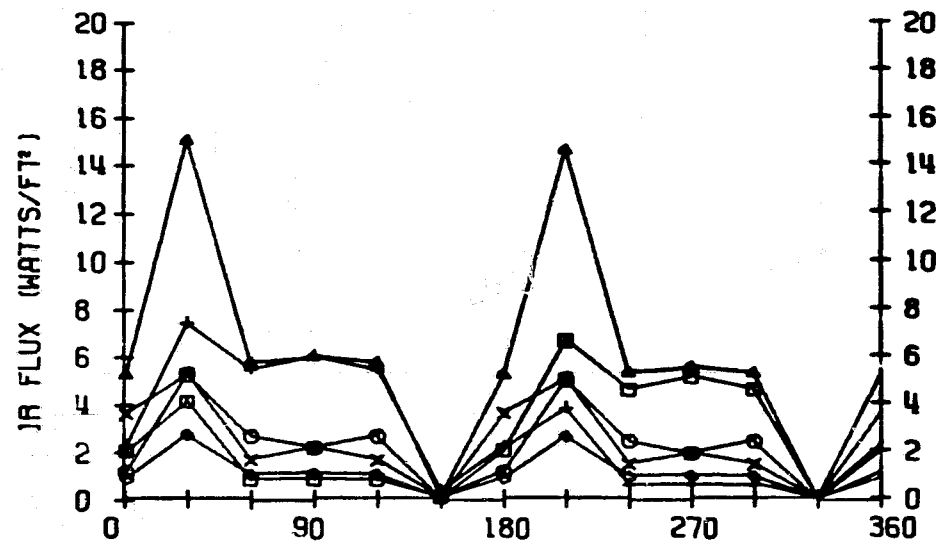
ORBIT POSITION (DEG)

250 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 3

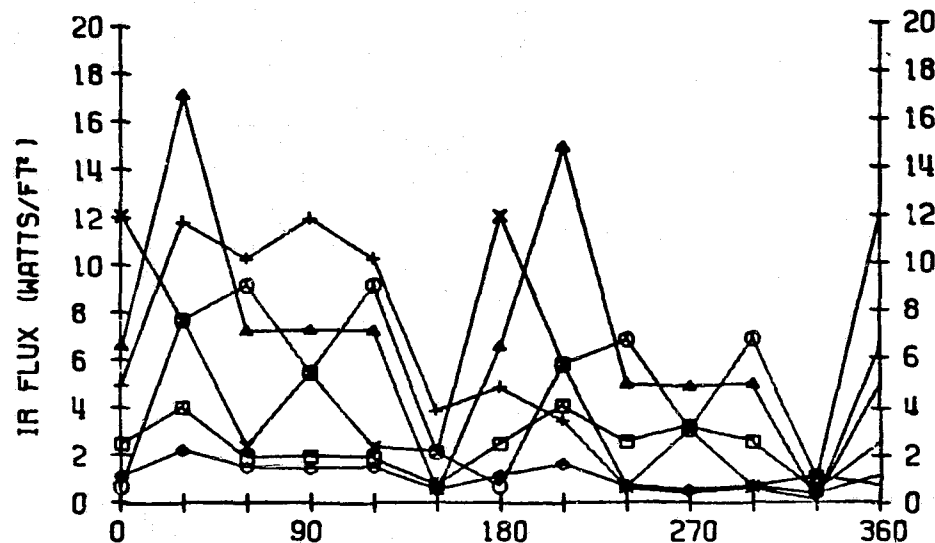


LOCATION 4

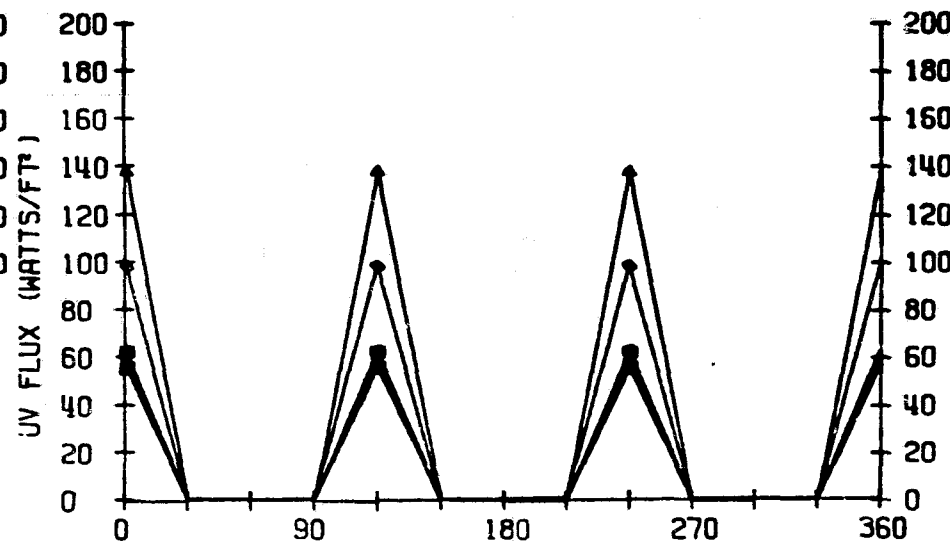
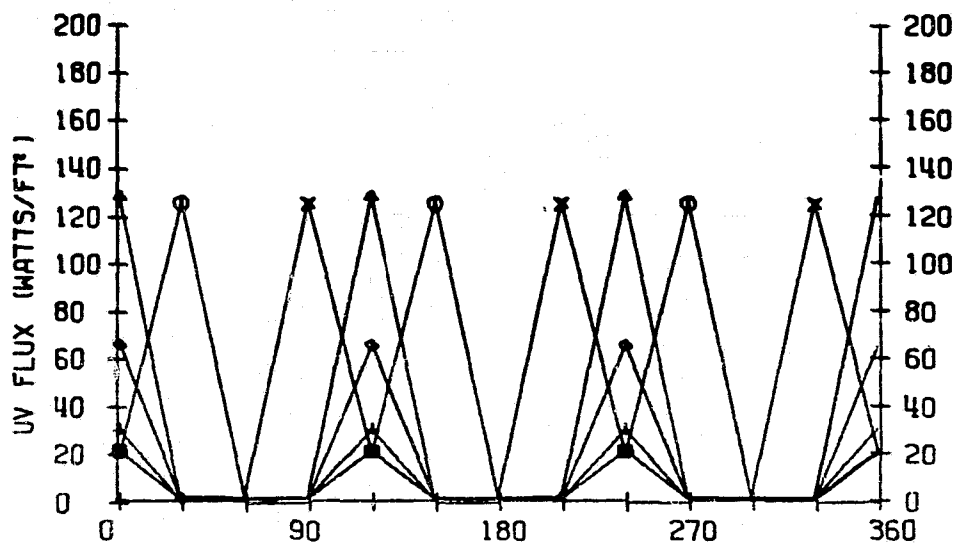
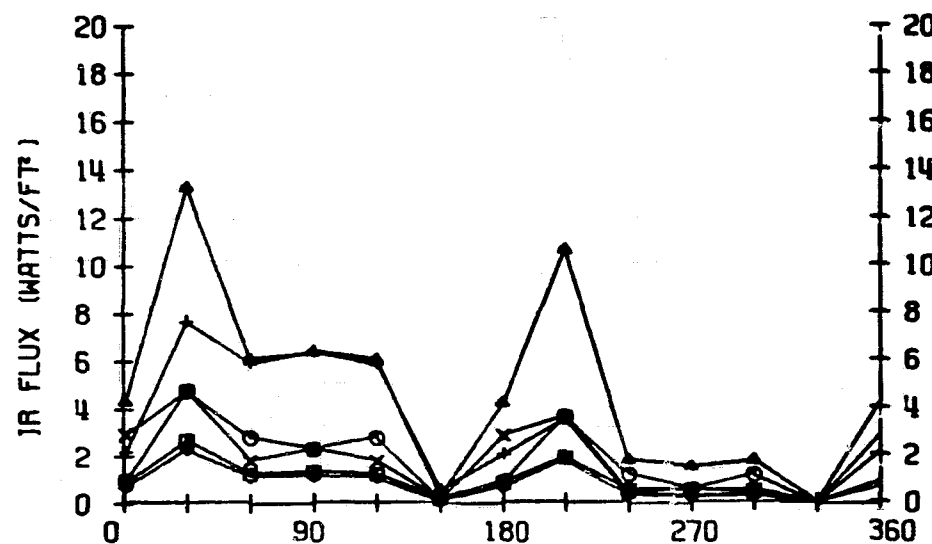


250 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	12.5	10.8	8.8	16.1	13.8	20.0
R	+Y (○)	12.3	9.3	6.7	17.4	8.3	19.4
F	+Z (△)	0.3	0.2	0.1	3.2	1.6	6.7
L	-X (+)	12.4	11.0	9.6	15.5	8.6	16.6
U	-Y (x)	12.1	10.2	6.9	17.2	8.3	19.4
X	-Z (◇)	21.1	23.8	19.7	23.2	21.0	25.6

FLUX DATA

FOR

ALTITUDE - 250 km

ORIENTATION NO. 8b

Passive thermal control (PTC), bottom towards sun at true anomaly = 0°

Beta angles - 0° , 45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

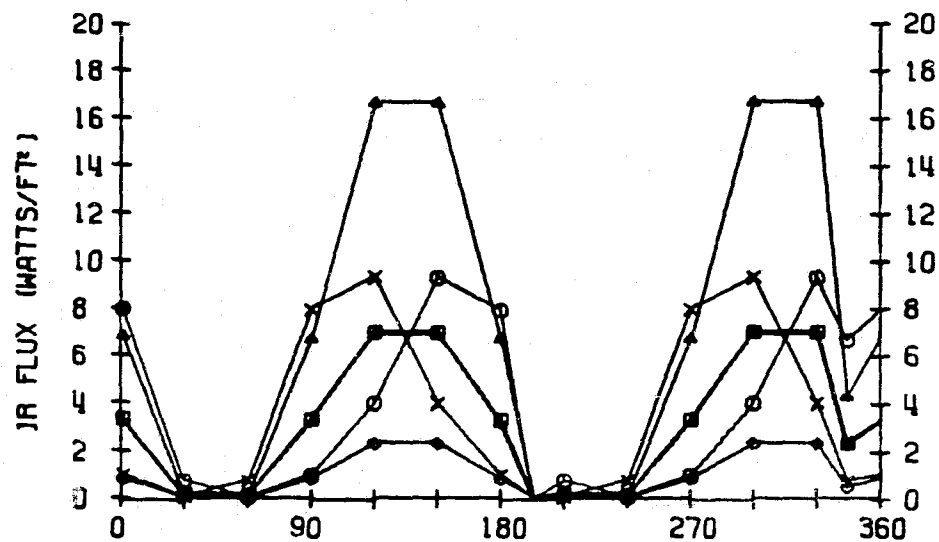
FOR

250 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

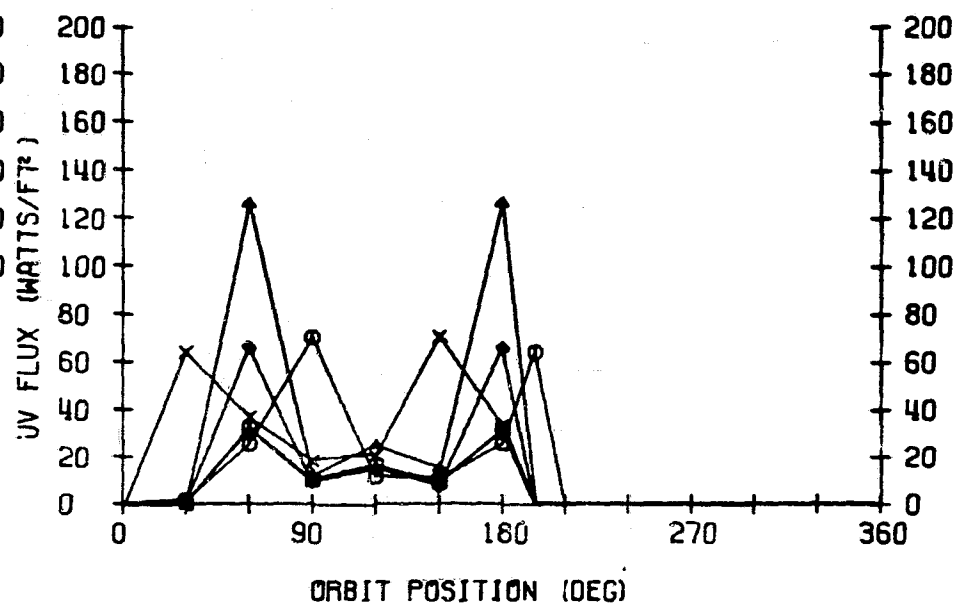
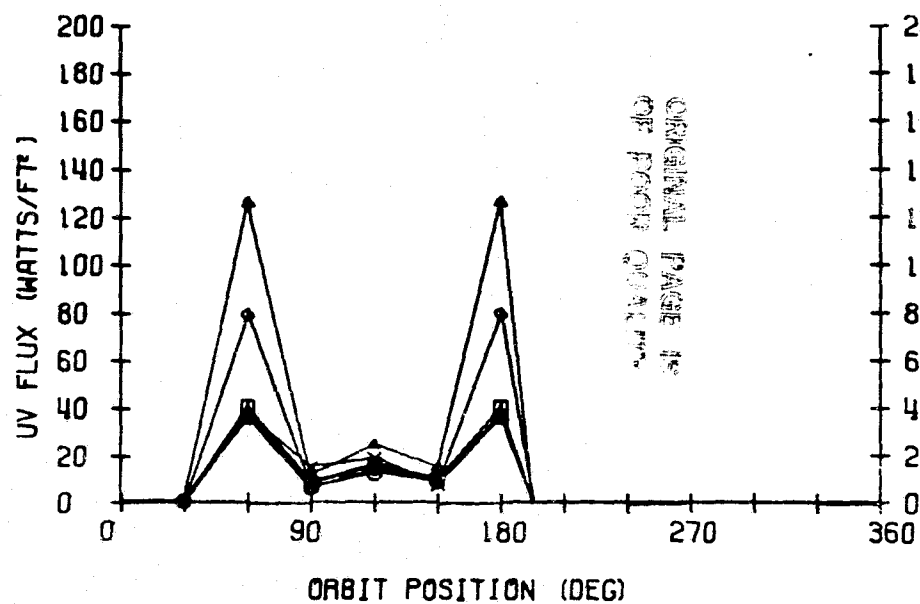
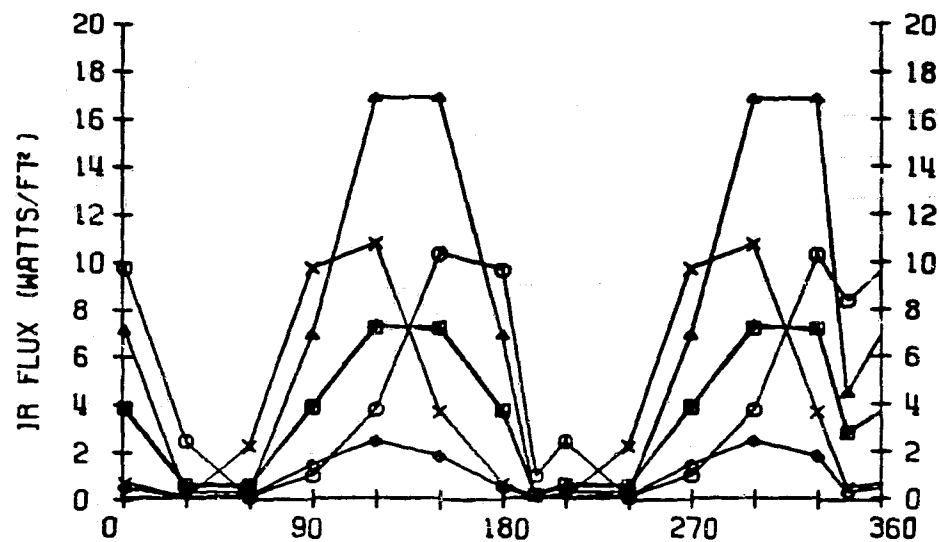
		LDC. 1	LDC. 2	LDC. 3	LDC. 4	LDC. 5	LDC. 6
	SURFACE DIRECTION						
I	+X (□)	3.5	3.9	4.5	2.7	2.4	1.1
R	+Y (○)	3.9	4.6	5.8	2.5	5.4	2.0
F	+Z (Δ)	7.8	8.0	8.0	6.8	7.4	5.4
L	-X (+)	3.5	3.9	4.4	2.8	4.6	2.7
U	-Y (x)	3.9	4.5	5.8	2.5	5.3	2.0
X	-Z (◇)	1.1	1.0	1.2	1.2	1.0	0.9
U	+X (□)	8.9	7.8	7.1	11.3	5.0	10.3
V	+Y (○)	7.9	13.0	13.6	11.5	18.3	11.6
F	+Z (Δ)	22.7	22.8	22.7	23.5	22.8	23.7
L	-X (+)	8.4	7.7	7.7	10.5	7.5	11.2
U	-Y (x)	9.0	19.6	28.7	11.6	28.2	11.7
X	-Z (◇)	14.0	12.3	12.2	16.5	11.7	16.6

250 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 1

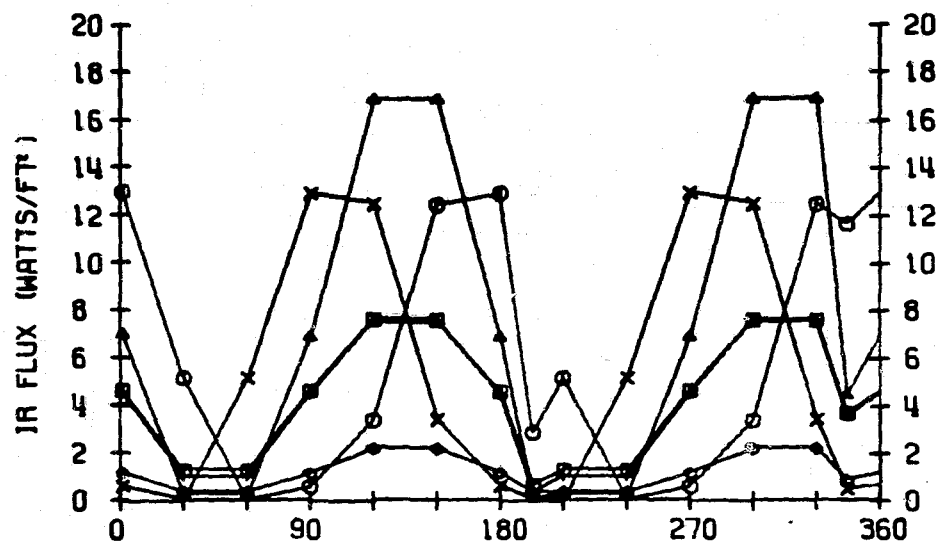


LOCATION 2

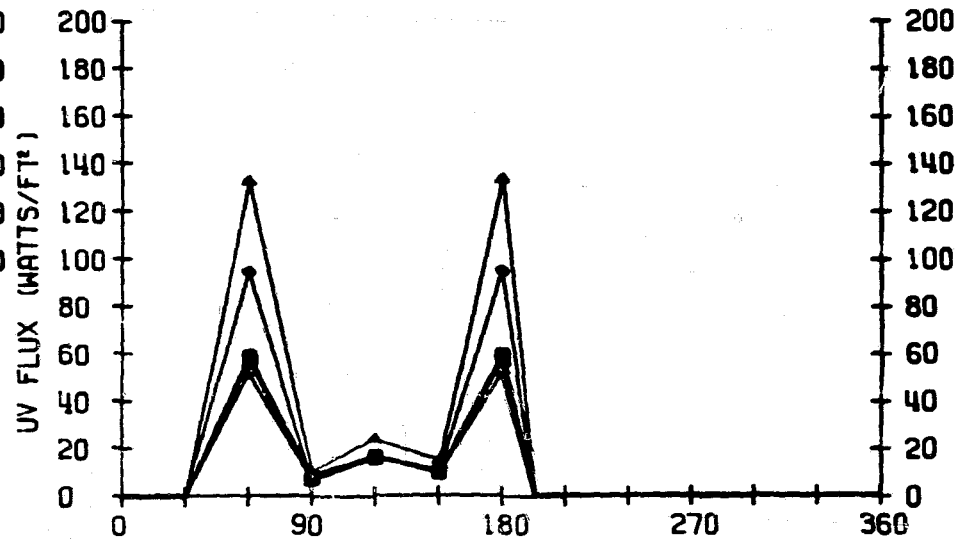
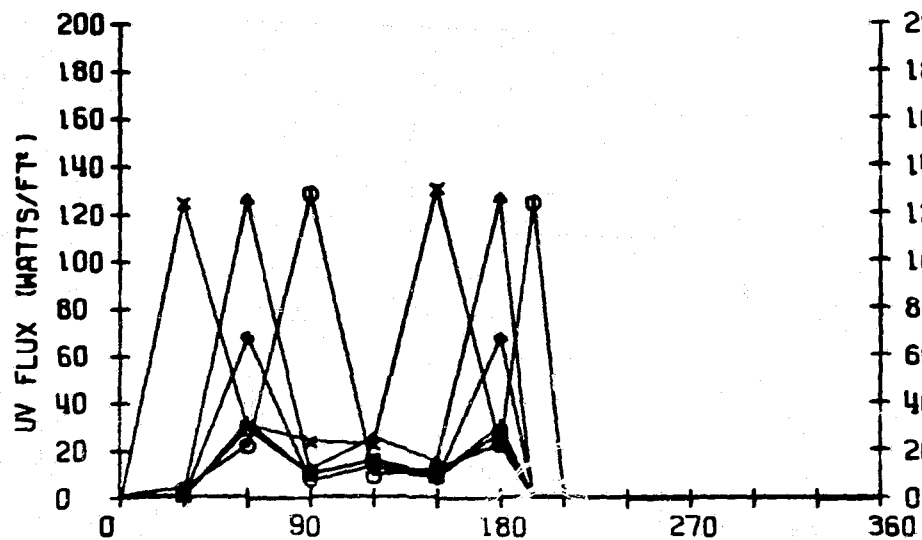
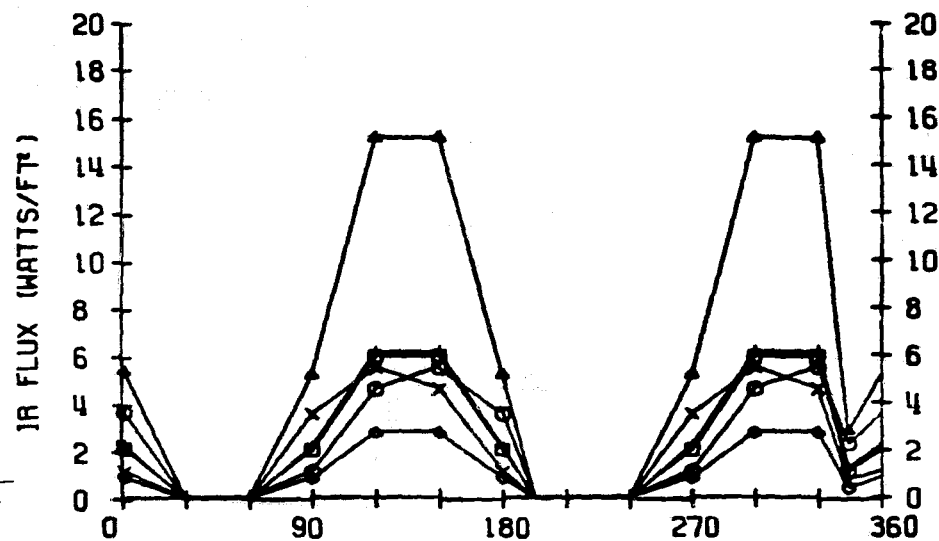


250 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 3



LOCATION 4

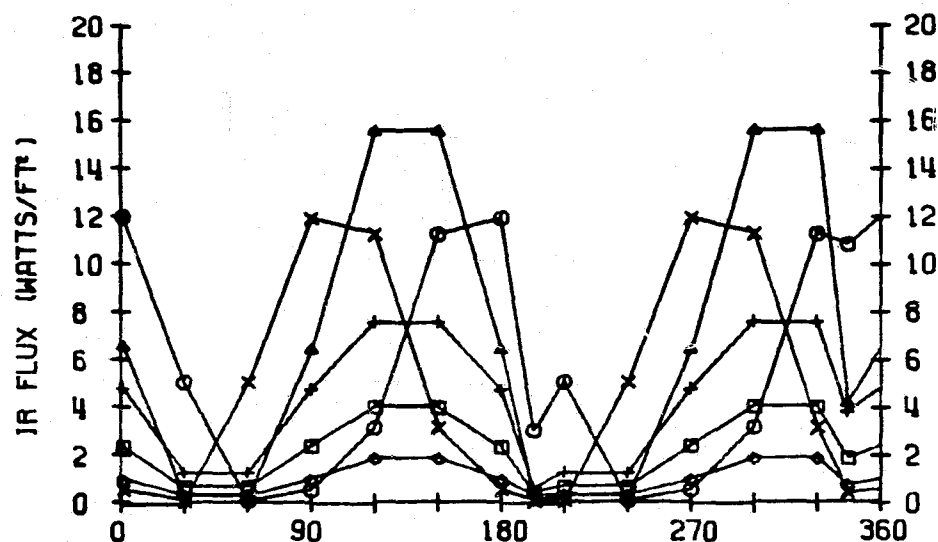


ORBIT POSITION (DEG)

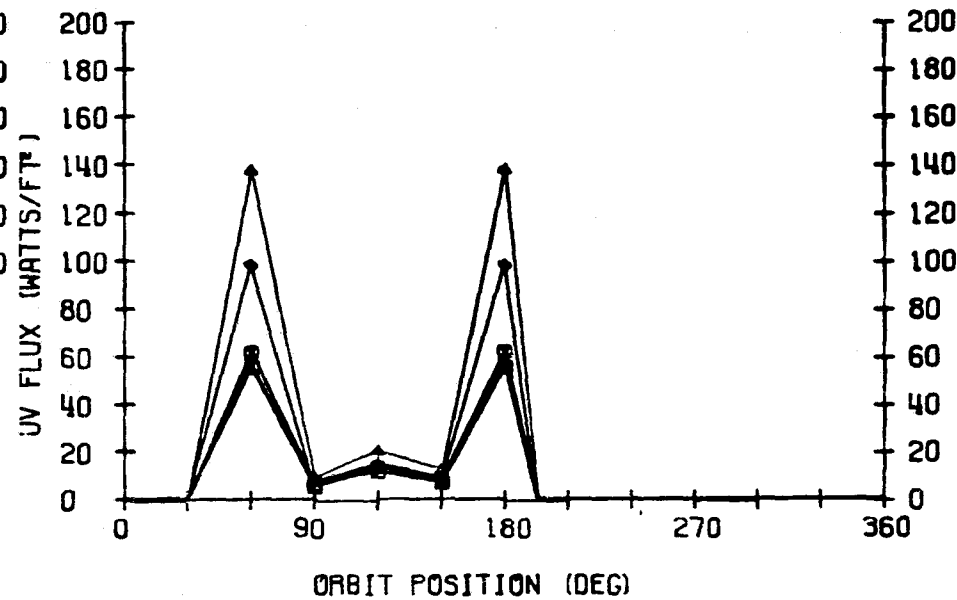
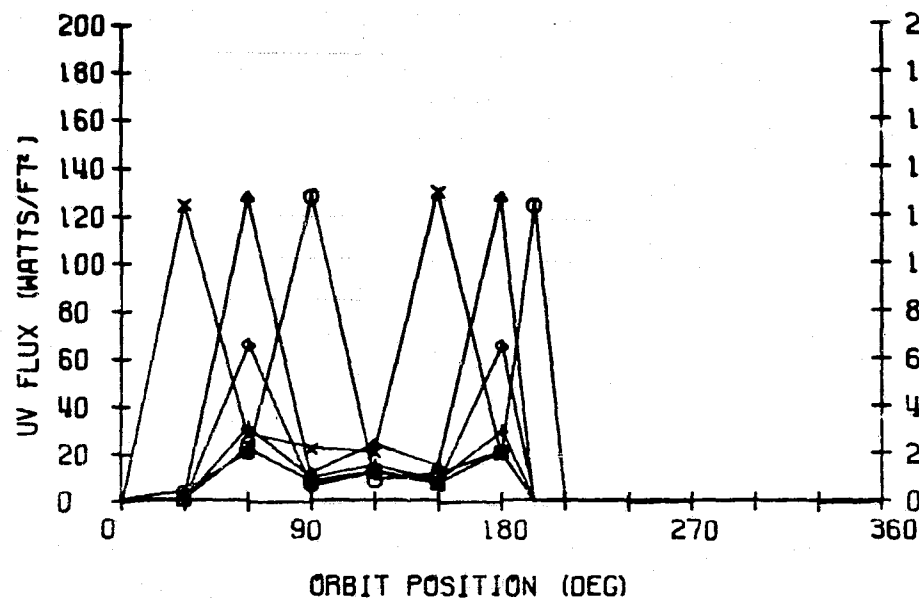
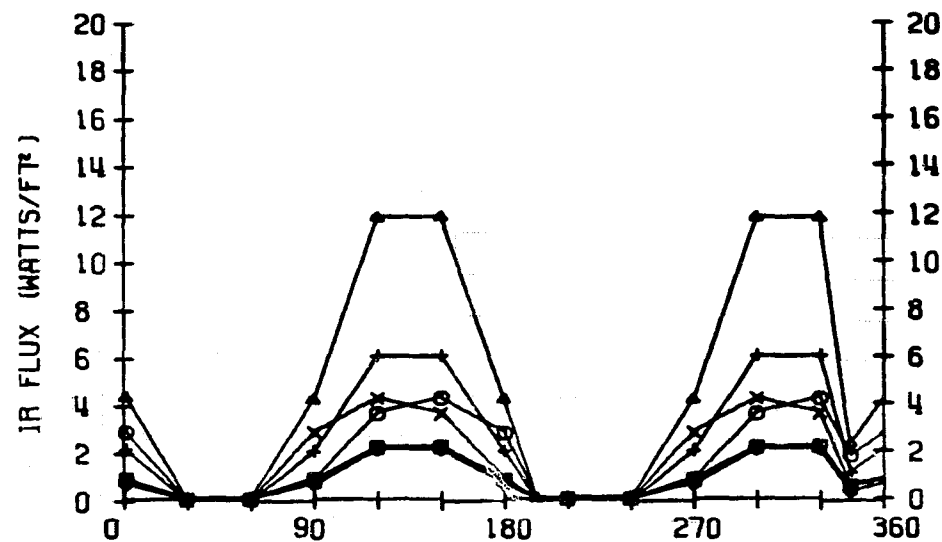
ORBIT POSITION (DEG)

250 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	10.1	9.0	7.1	13.0	11.5	16.2
R	+Y (○)	10.2	8.3	5.6	14.2	6.9	15.6
F	+Z (△)	0.2	0.2	0.1	2.6	1.4	5.6
L	-X (+)	10.1	9.0	7.8	12.6	7.0	13.2
U	-Y (x)	9.3	8.3	5.7	13.9	6.8	15.4
X	-Z (◇)	17.0	17.1	15.9	18.5	16.9	20.0

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

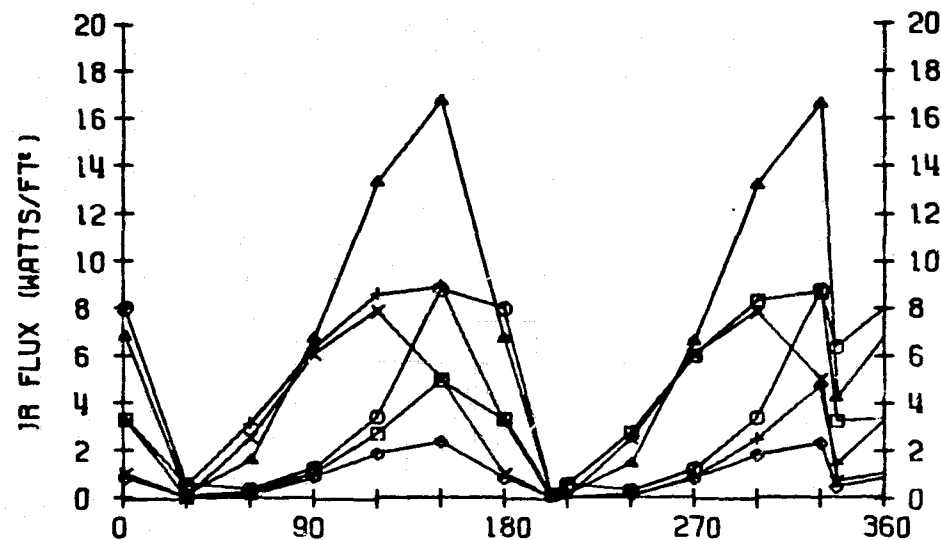
FOR

250 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

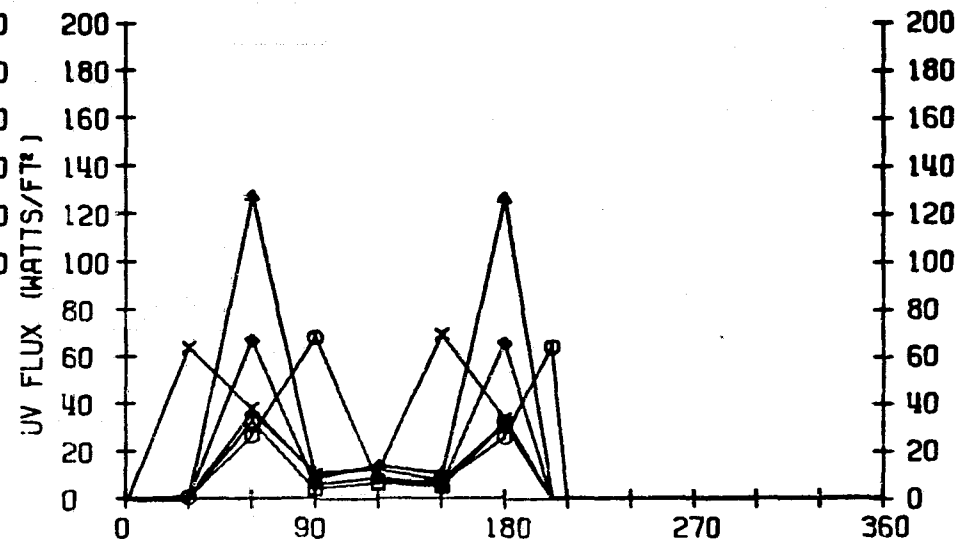
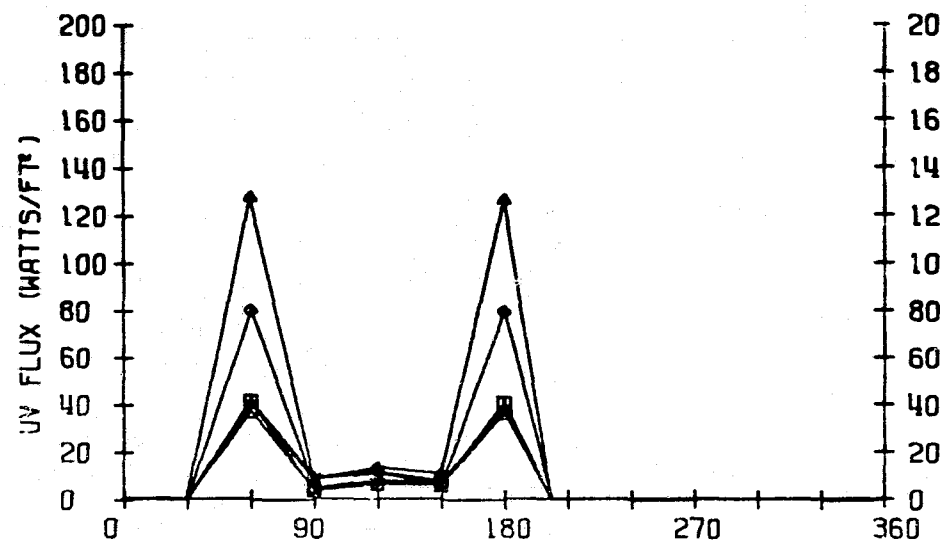
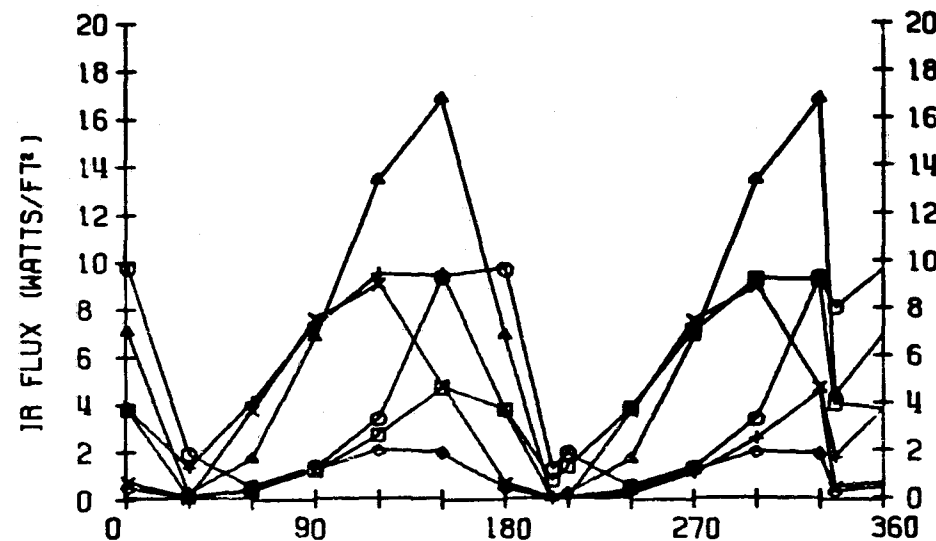
		LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
	SURFACE DIRECTION						
I	+X (□)	3.5	4.0	4.4	2.3	2.3	1.0
R	+Y (○)	3.7	4.4	5.4	2.3	4.9	1.9
F	+Z (Δ)	7.5	7.5	7.6	6.4	7.1	5.1
L	-X (+)	3.6	4.0	4.6	2.3	4.3	2.3
U	-Y (X)	3.8	4.3	5.4	2.3	5.1	1.9
X	-Z (◇)	1.0	1.0	1.2	1.1	1.0	0.9
U	+X (□)	7.3	6.3	5.3	10.5	5.5	10.7
V	+Y (○)	7.4	13.1	19.2	11.2	19.3	11.8
F	+Z (Δ)	22.5	22.5	22.5	23.4	23.0	24.4
L	-X (+)	8.7	8.1	8.3	10.7	8.3	11.8
U	-Y (X)	8.1	18.6	27.2	11.2	27.3	11.9
X	-Z (◇)	14.0	12.0	12.1	16.6	12.0	17.2

250 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 1

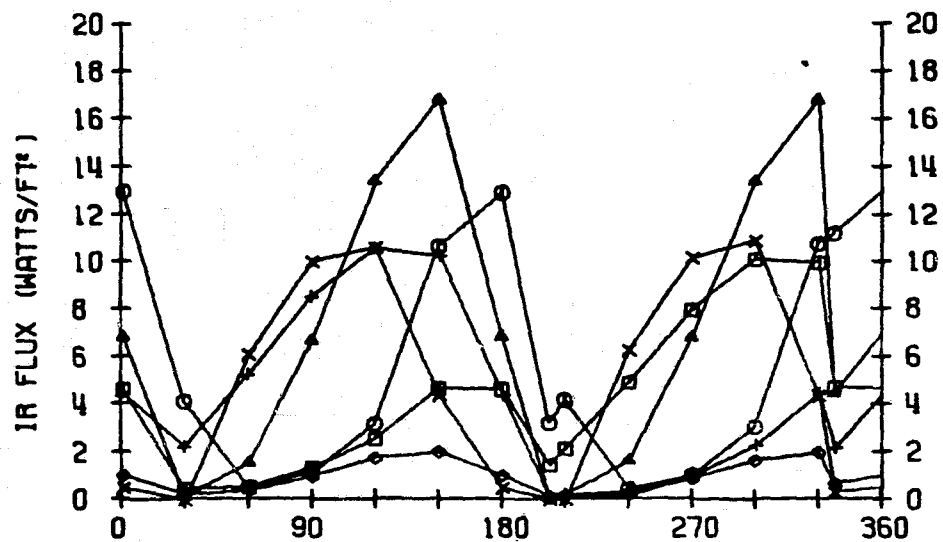


LOCATION 2

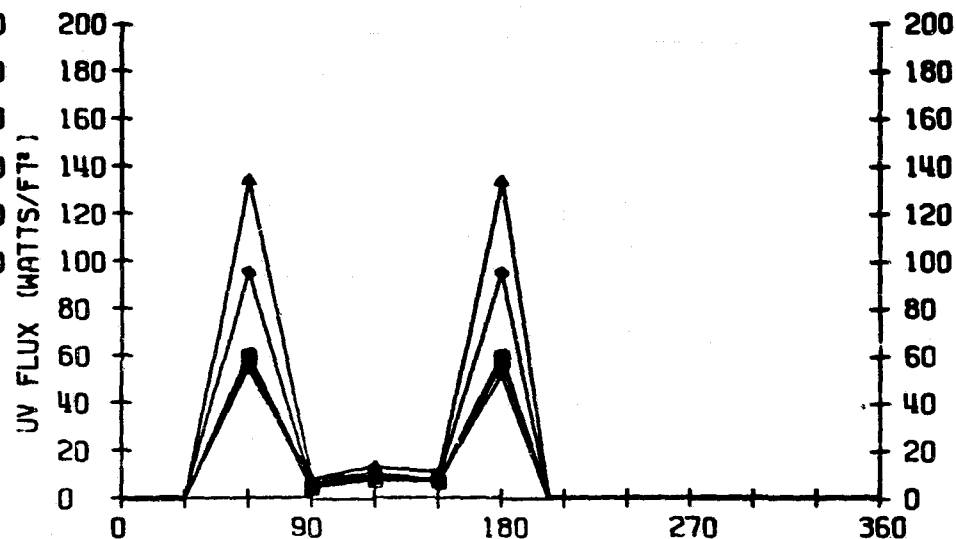
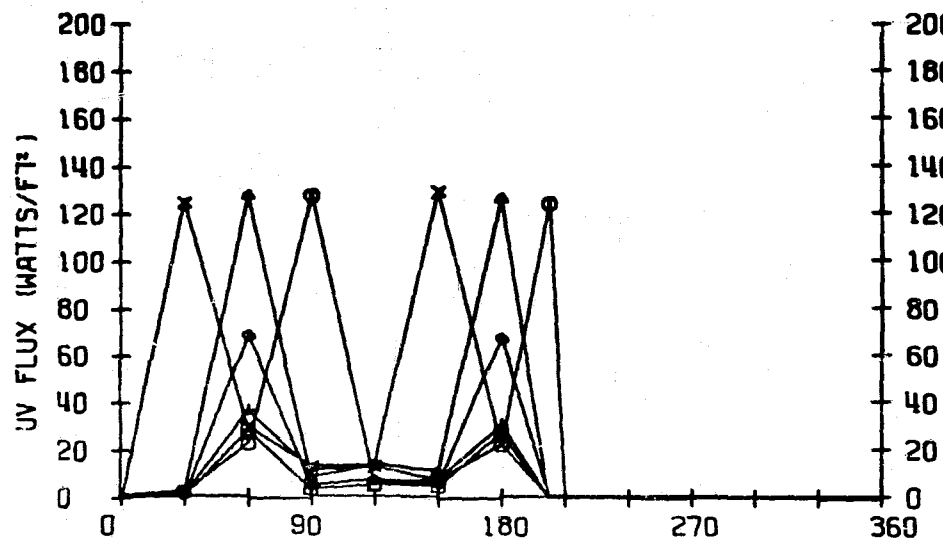
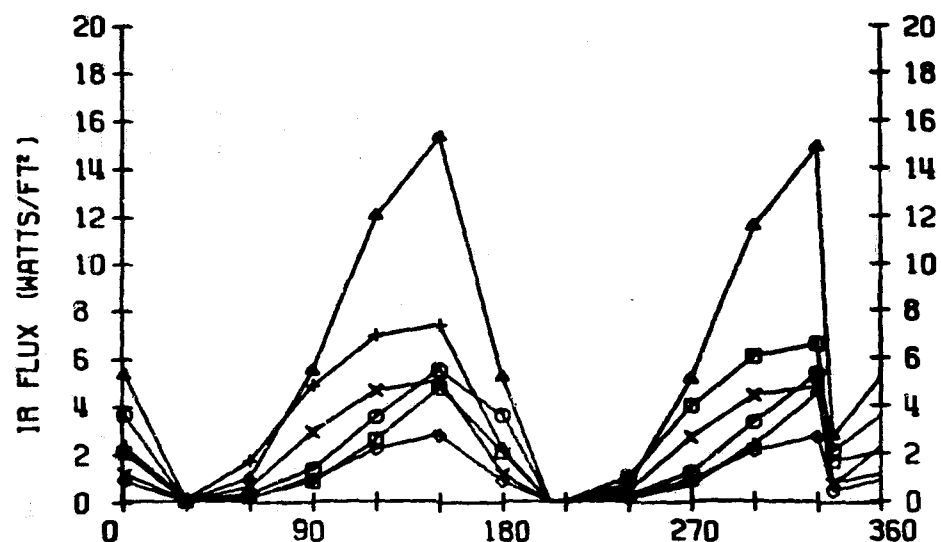


250 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 3



LOCATION 4



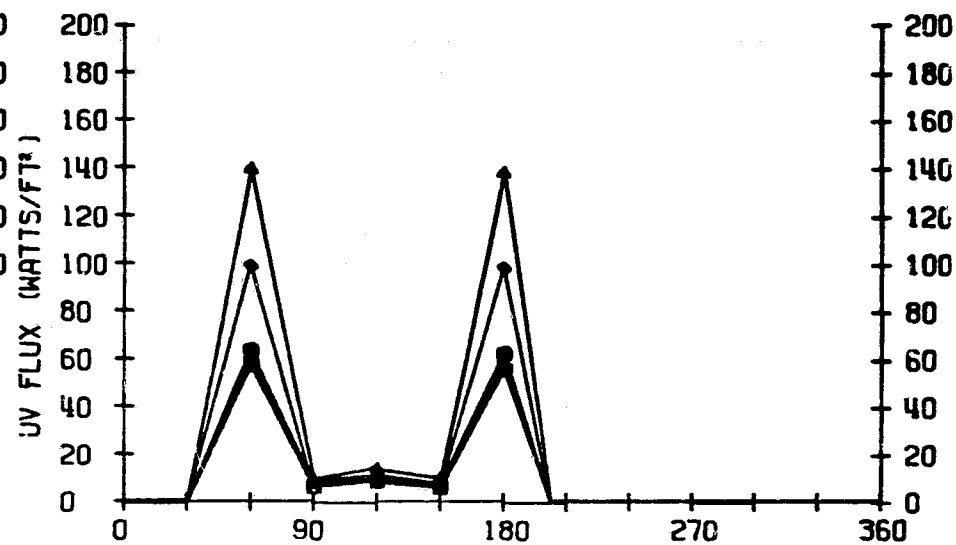
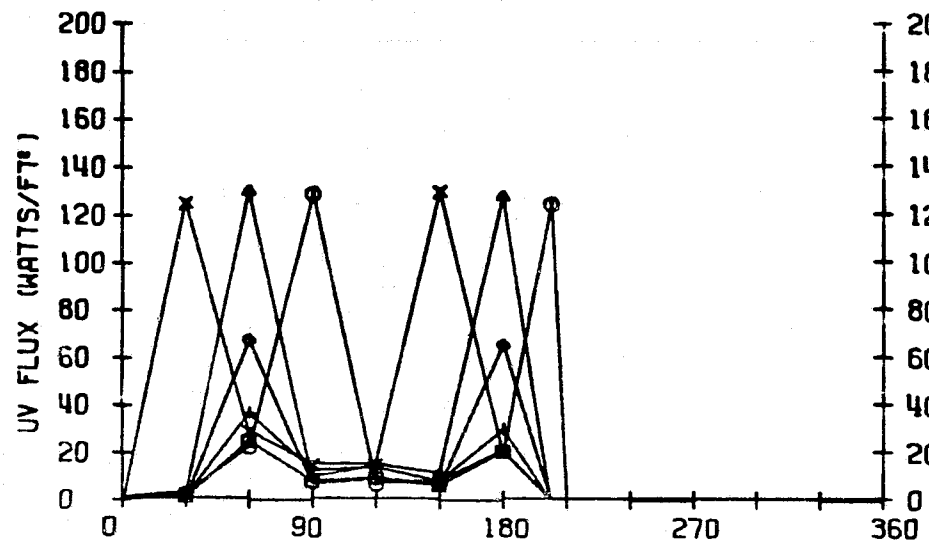
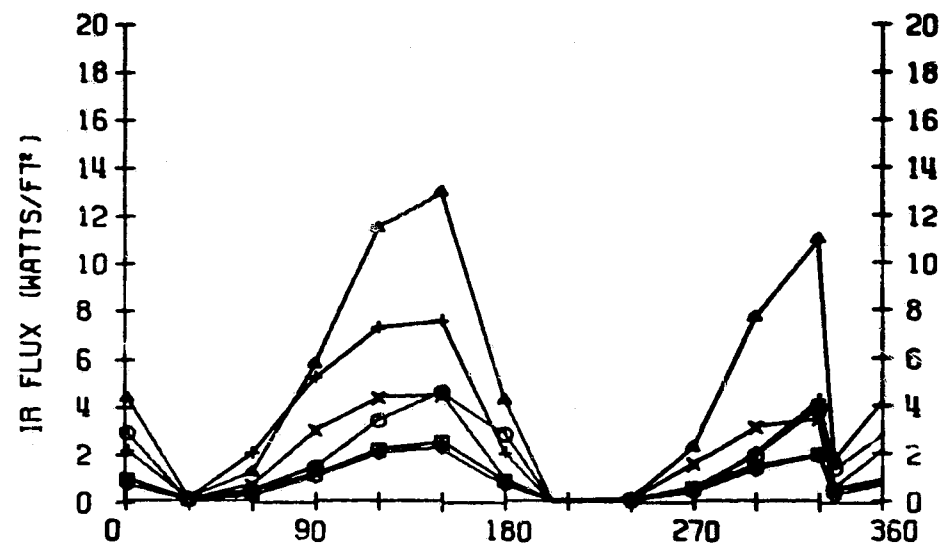
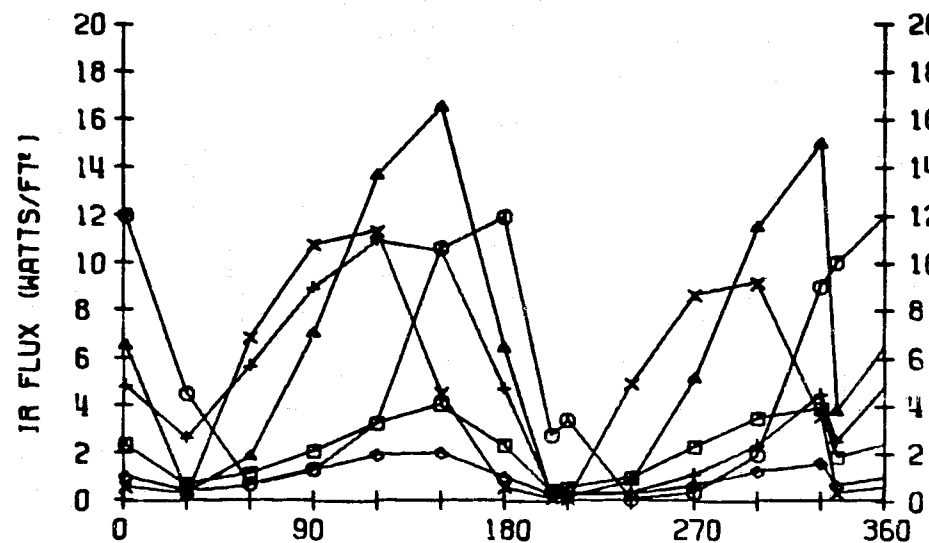
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

250 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 5

LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	10.0	8.8	7.1	12.8	11.8	16.5
R	+Y (○)	9.9	8.0	5.4	13.8	6.9	15.7
F	+Z (△)	0.2	0.2	0.1	2.6	1.4	5.7
L	-X (+)	9.8	8.7	7.5	12.2	6.9	13.2
U	-Y (x)	9.6	8.1	5.5	13.5	6.8	15.6
X	-Z (◇)	16.5	16.6	15.5	19.0	17.0	20.2

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FLUX DATA

FOR

ALTITUDE - 250 km

ORIENTATION NO. 8c

Passive thermal control (PTC), bay towards earth at true anomaly = 0°

Beta angles - 0° , 45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

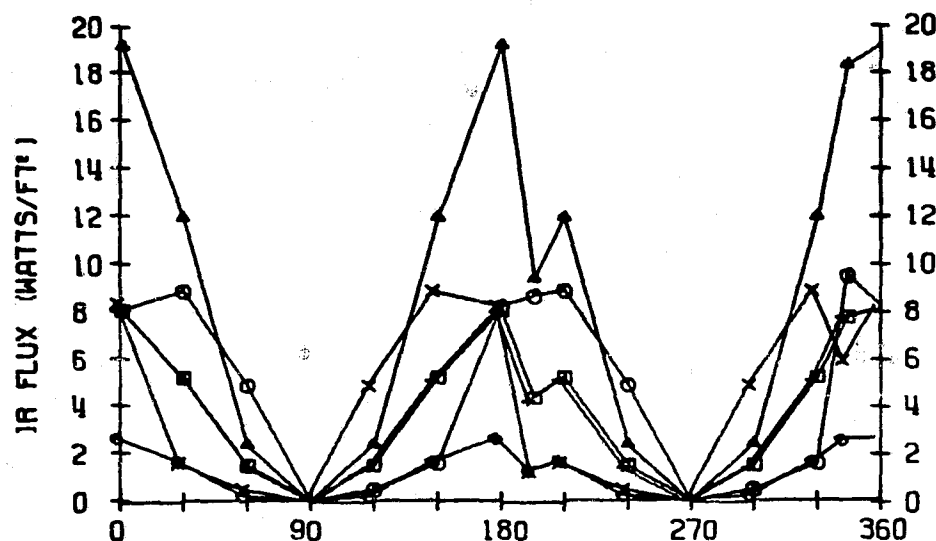
FOR

250 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

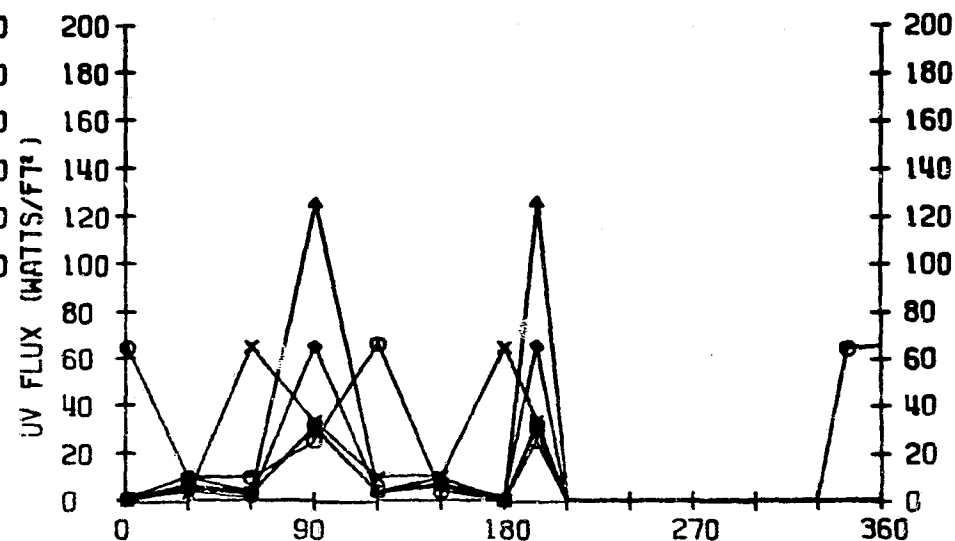
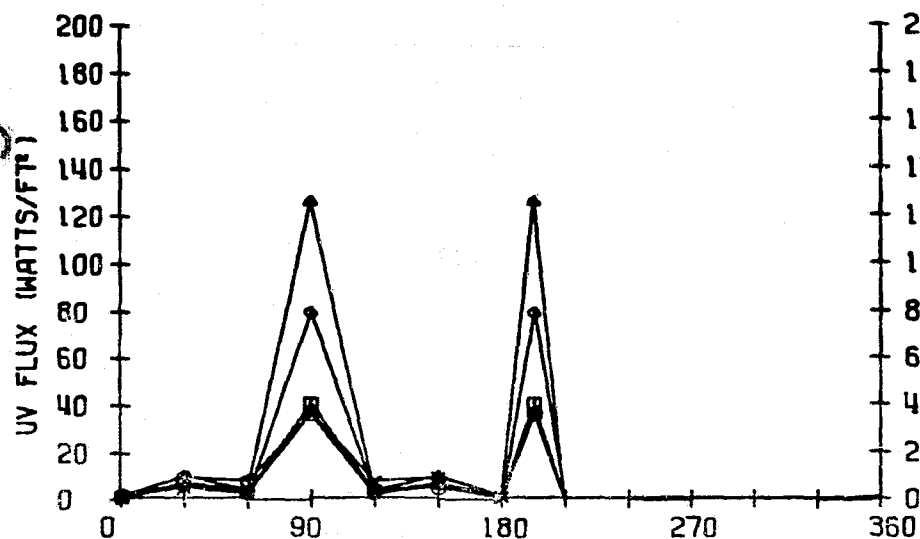
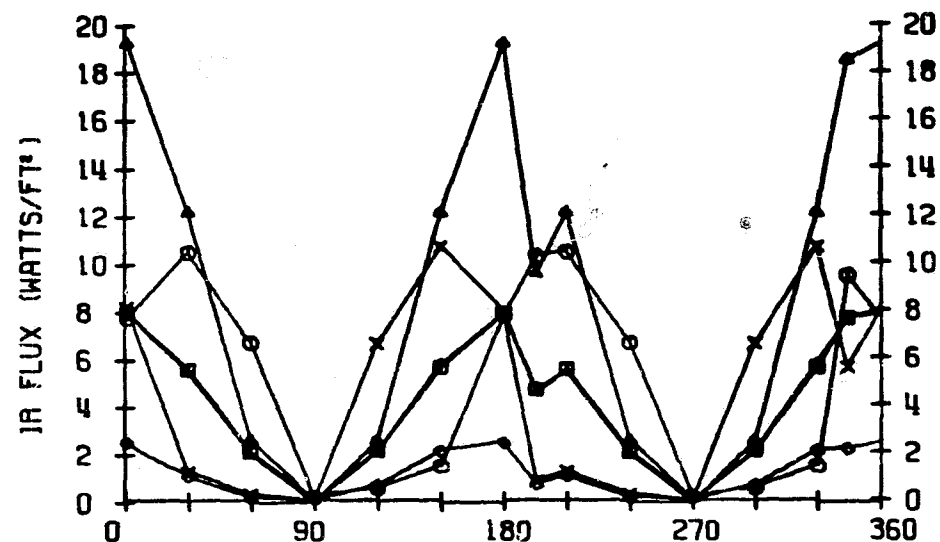
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.6	3.9	4.4	2.6	2.3	1.0
R	+Y (○)	4.0	4.5	5.5	2.3	5.1	1.8
F	+Z (△)	8.0	8.1	8.1	6.6	7.5	5.2
L	-X (+)	3.6	3.9	4.3	2.8	4.5	2.7
U	-Y (×)	4.0	4.5	5.6	2.3	5.2	1.8
X	-Z (◇)	1.1	1.1	1.2	1.2	1.0	0.9
U	+X (□)	6.0	5.2	4.9	7.4	3.9	7.0
V	+Y (○)	5.9	15.9	26.2	7.7	26.0	7.8
F	+Z (△)	15.4	15.5	15.4	15.8	15.6	16.1
L	-X (+)	5.6	5.1	5.2	6.8	5.2	7.4
U	-Y (×)	5.9	15.1	23.4	7.6	23.1	7.8
X	-Z (◇)	9.5	8.2	8.3	11.1	8.0	11.3

250 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 1



LOCATION 2



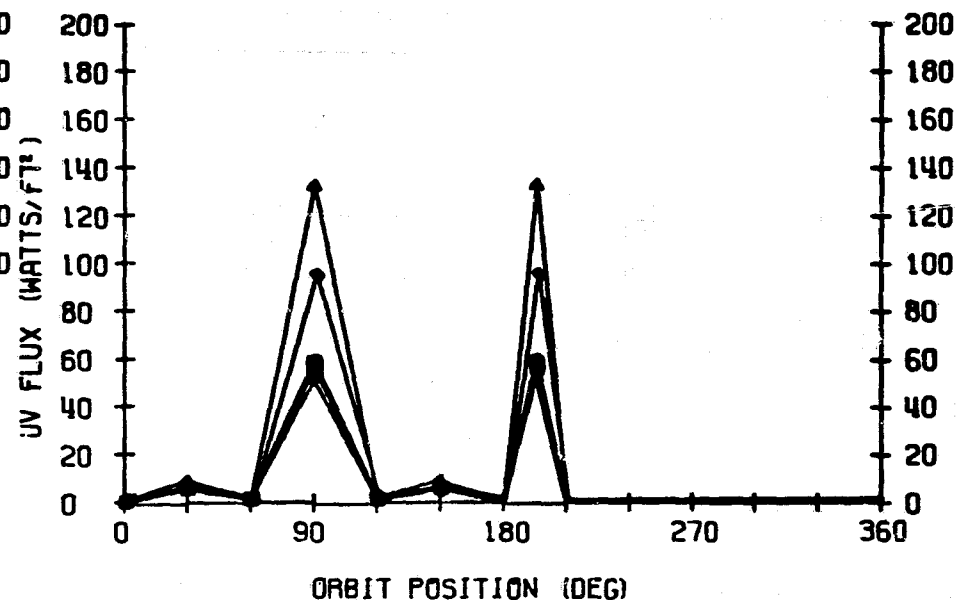
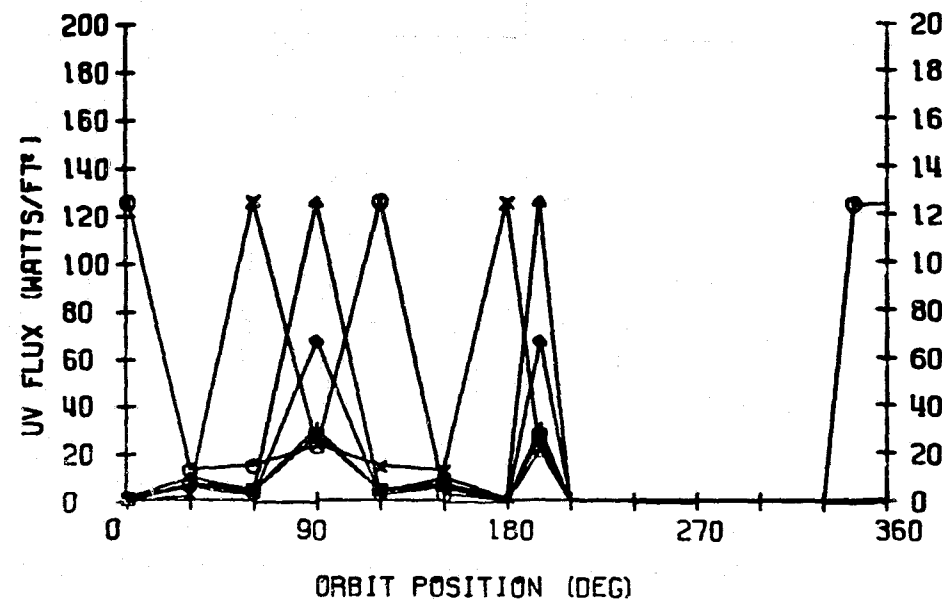
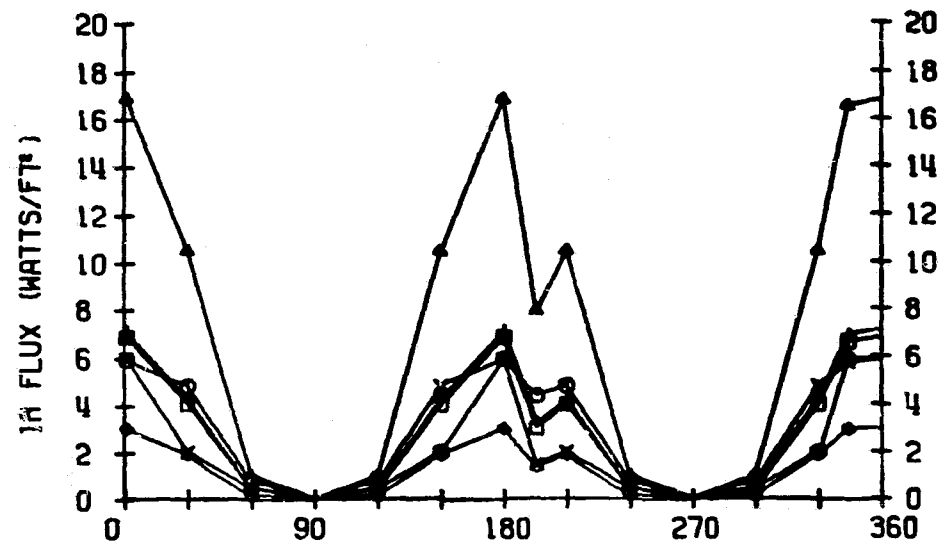
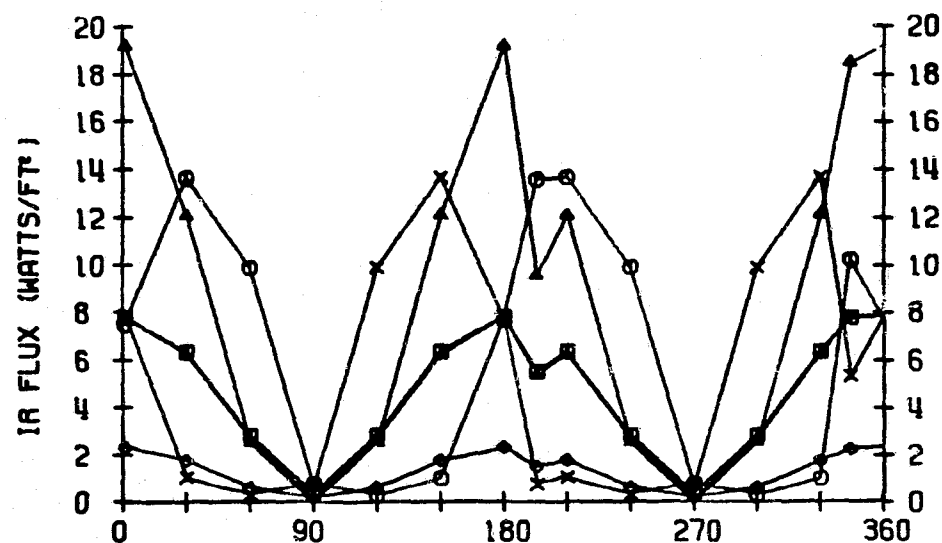
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

250 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

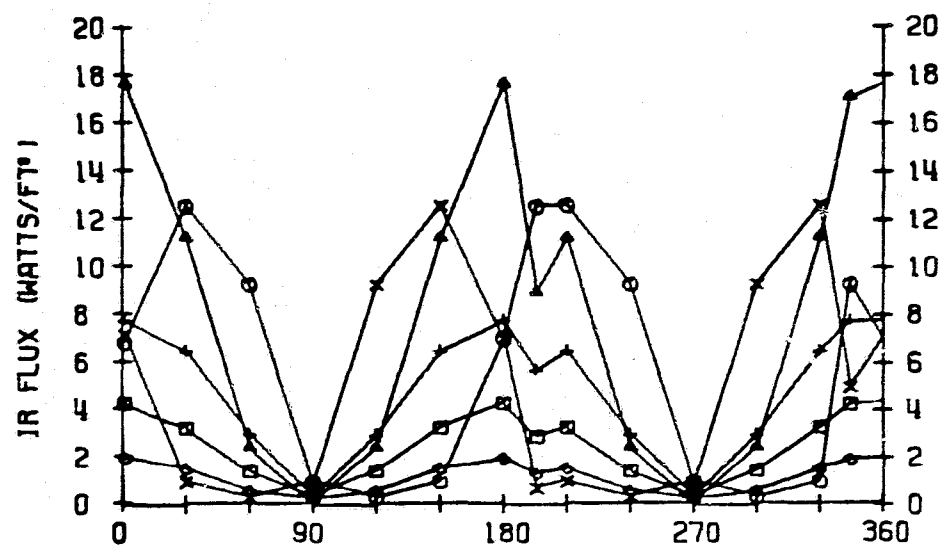
LOCATION 3

LOCATION 4

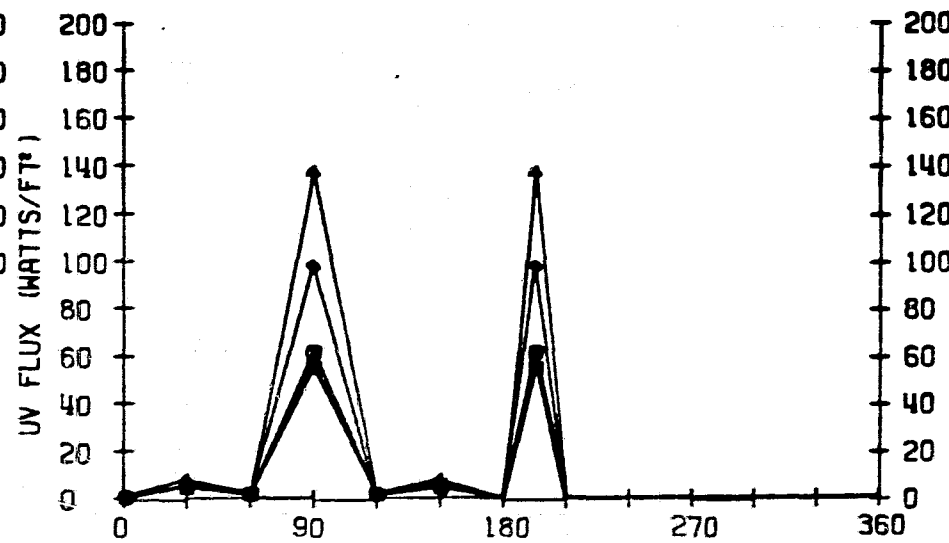
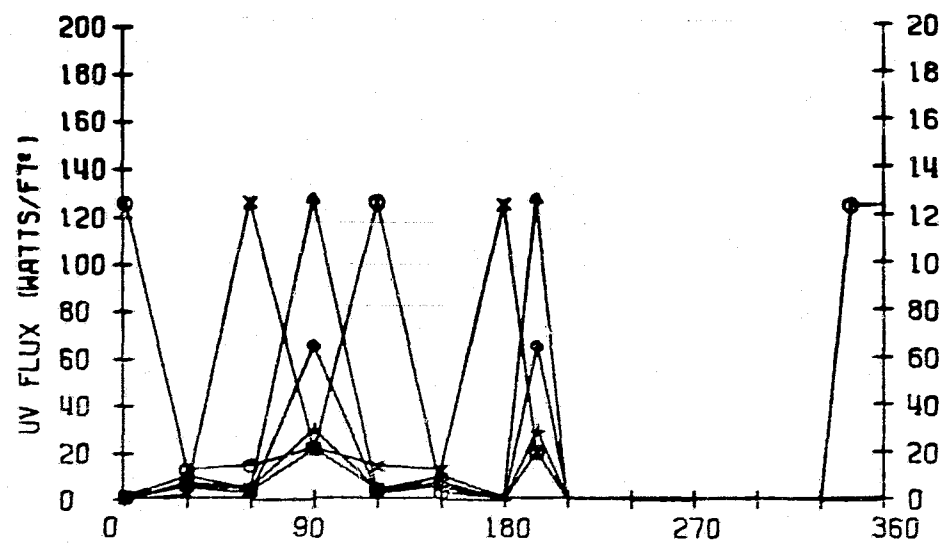
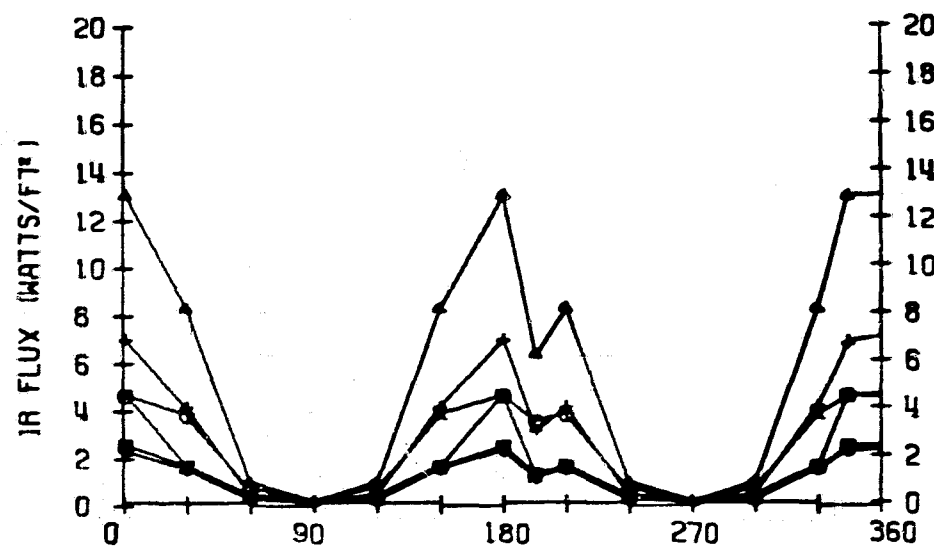


250 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

	SURFACE DIRECTION	LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
I	+X (□)	9.1	8.0	6.4	11.6	10.4	14.4
R	+Y (○)	9.0	7.4	5.0	12.5	5.1	13.8
F	+Z (Δ)	0.2	0.1	0.1	2.4	1.2	5.0
L	-X (+)	9.0	8.0	7.0	11.1	6.3	11.7
U	-Y (x)	9.1	7.5	5.2	12.6	6.2	13.9
X	-Z (◇)	15.1	15.2	14.3	16.3	15.1	17.6

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

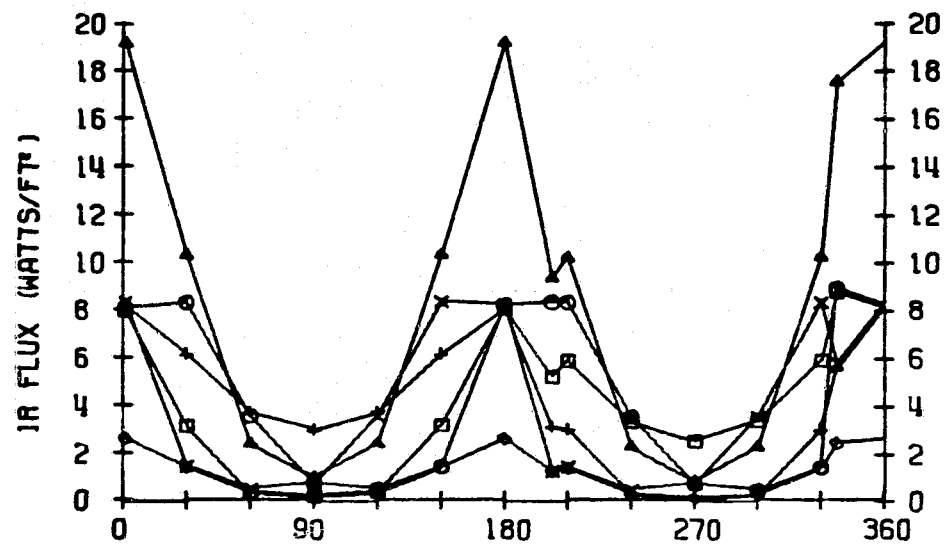
250 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.7	4.1	4.7	2.7	2.2	1.0
R	+Y (○)	3.8	4.3	5.3	2.3	4.9	1.8
F	+Z (Δ)	7.5	7.7	7.7	6.3	7.0	4.9
L	-X (+)	3.8	4.2	4.8	3.0	4.9	3.0
U	-Y (X)	3.8	4.3	5.4	2.3	4.9	1.8
X	-Z (◇)	1.0	1.0	1.2	1.1	1.0	0.8
U	+X (□)	5.5	4.5	4.0	7.4	4.1	7.6
V	+Y (○)	5.5	16.6	27.9	7.8	28.1	8.3
F	+Z (Δ)	15.9	15.9	15.9	16.5	16.3	17.3
L	-X (+)	6.2	5.9	6.2	7.4	6.3	8.4
U	-Y (X)	5.5	15.4	23.9	7.8	23.9	8.3
X	-Z (◇)	9.9	8.4	8.6	11.7	8.6	12.2

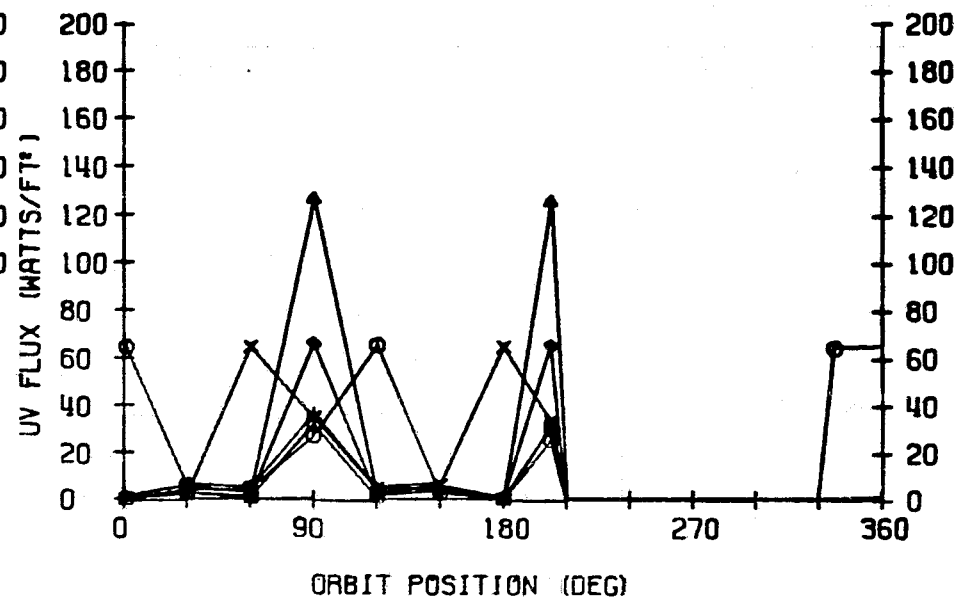
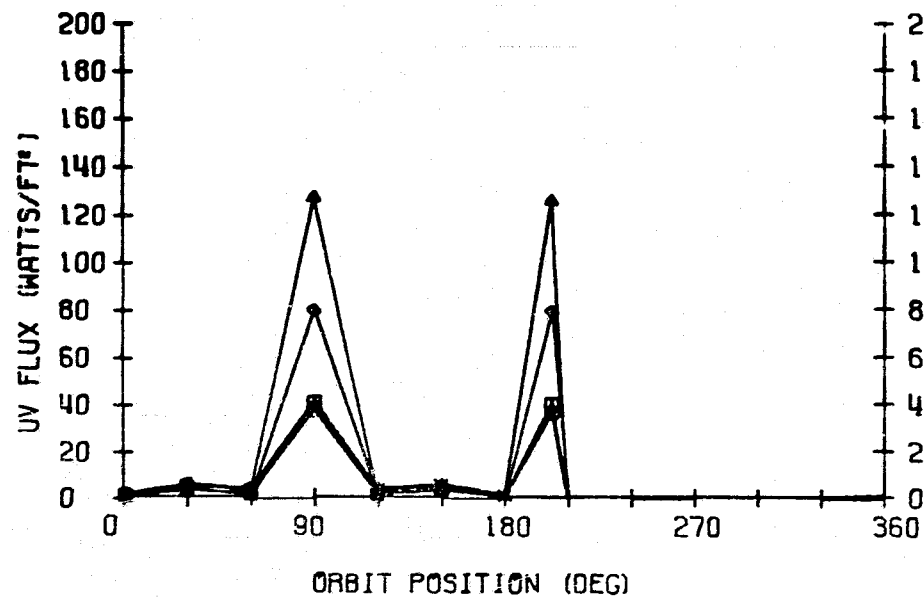
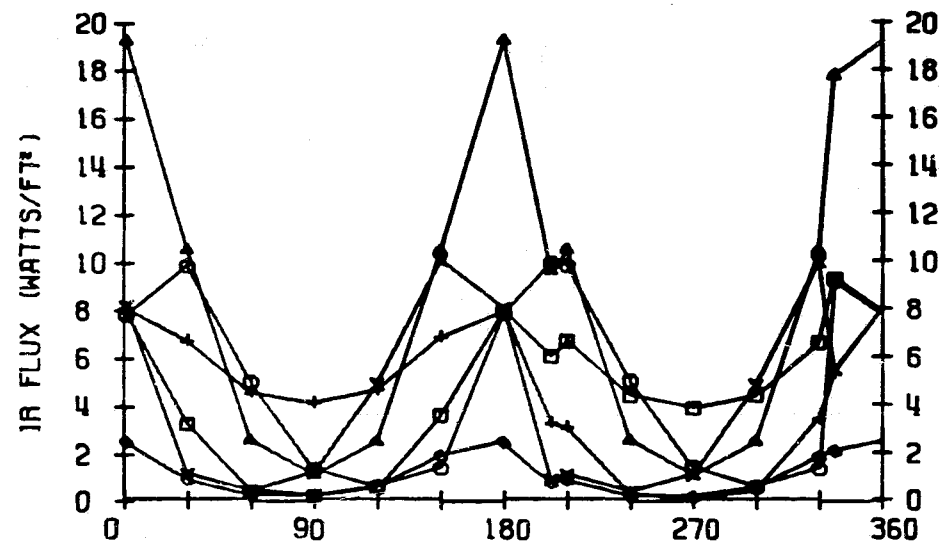
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250 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 1

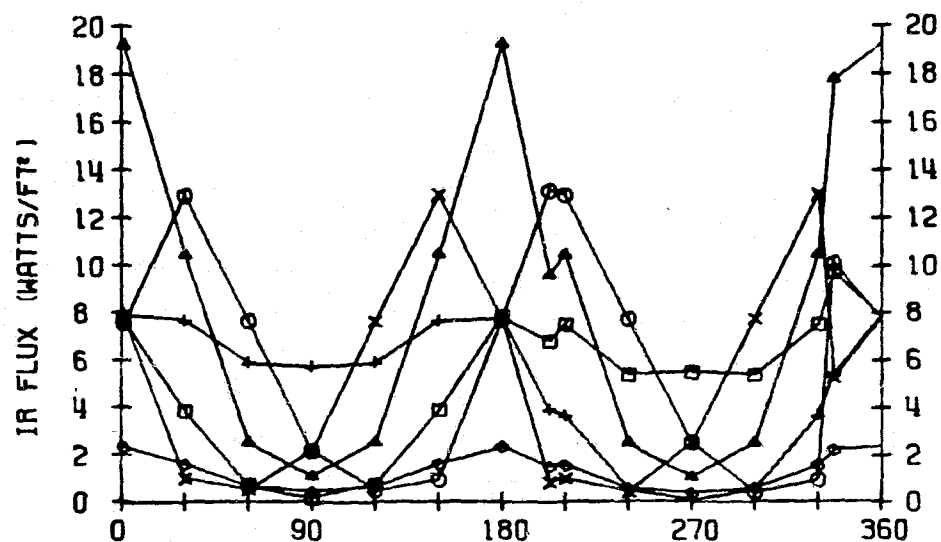


LOCATION 2

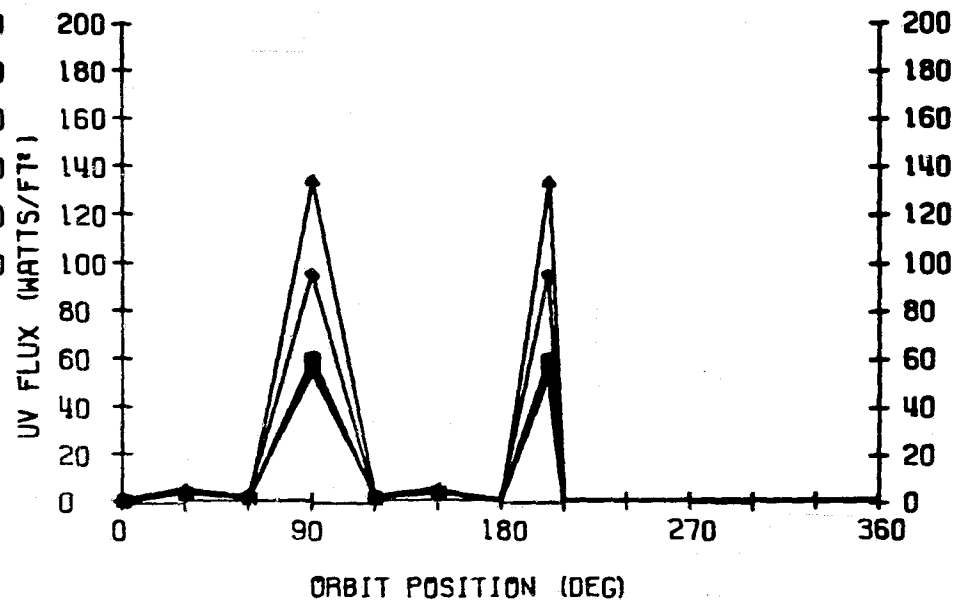
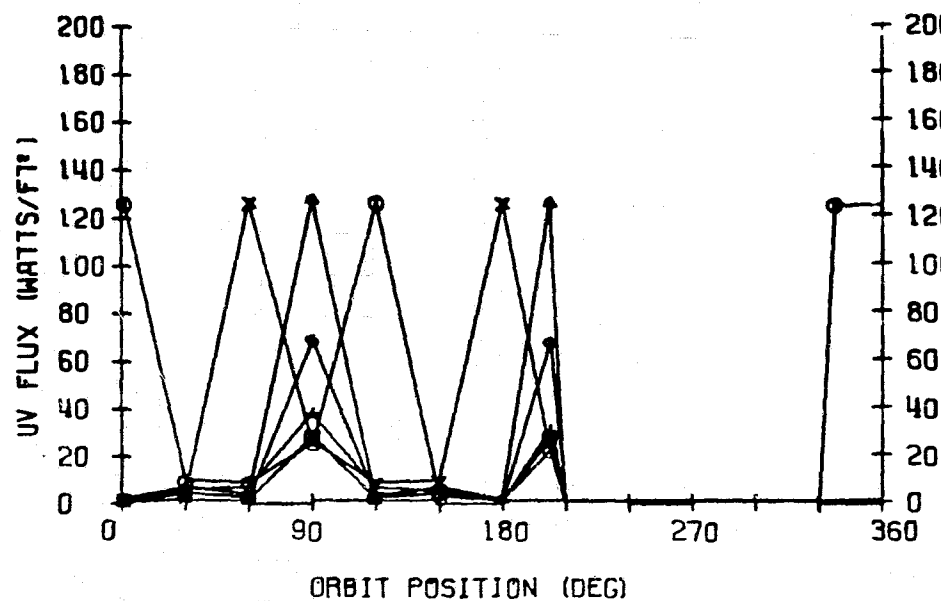
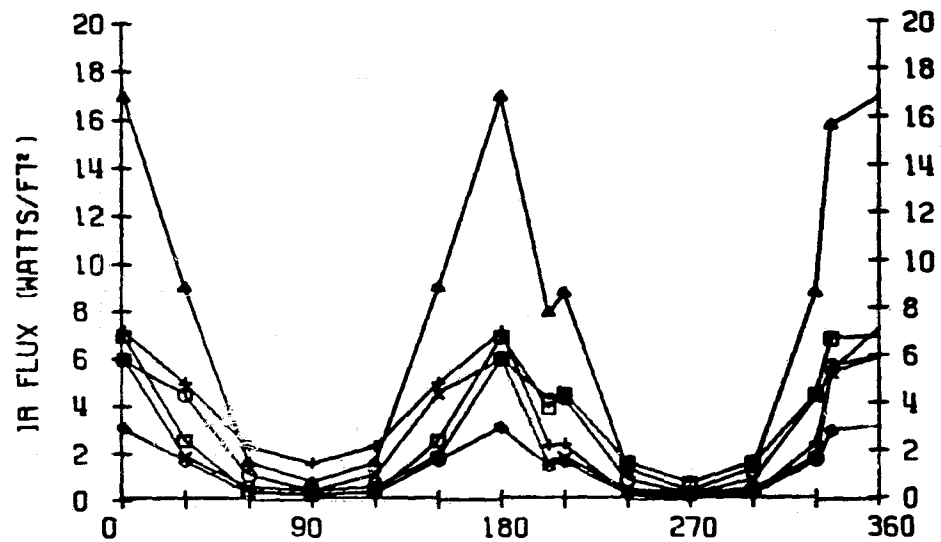


250 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 3

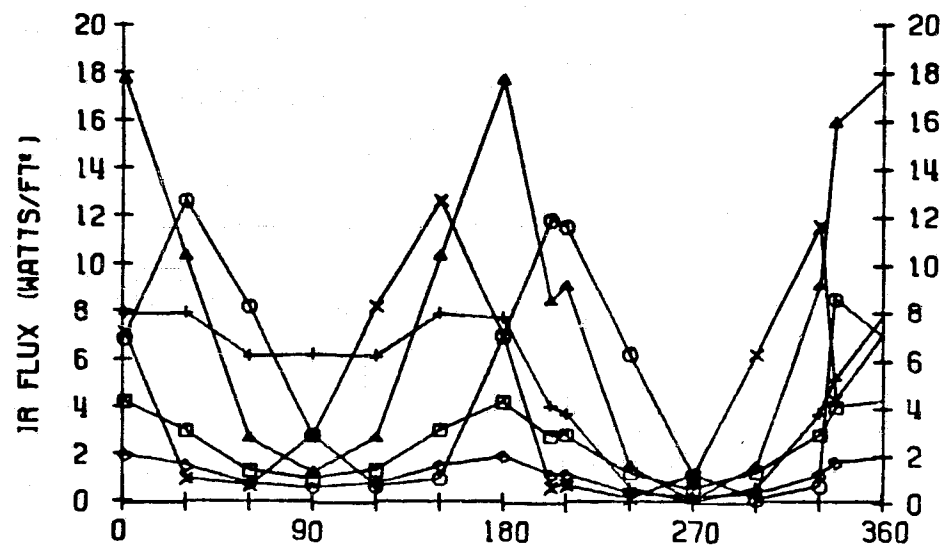


LOCATION 4

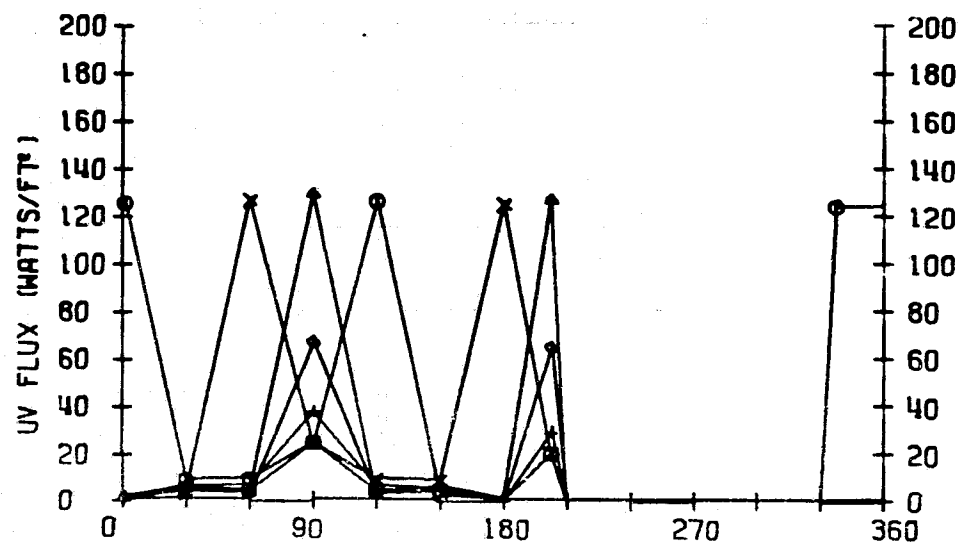
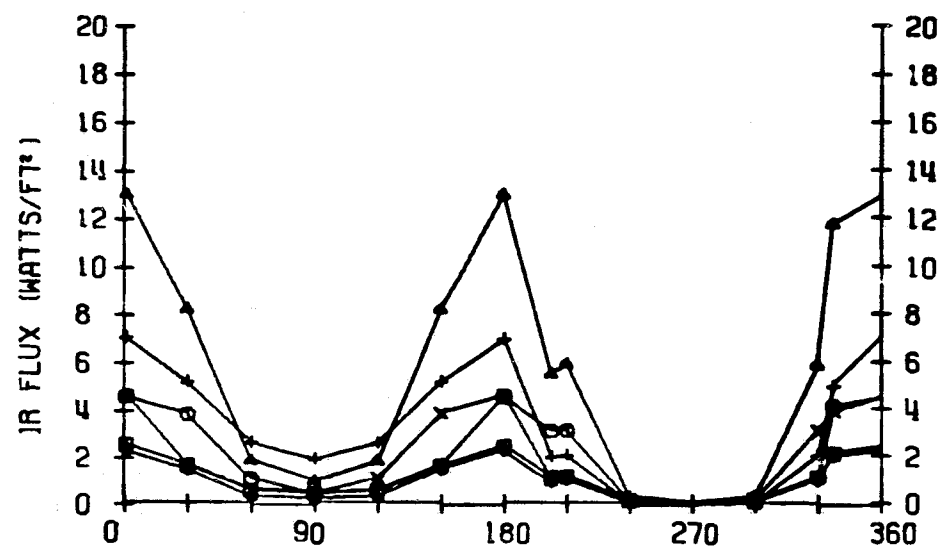


250 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

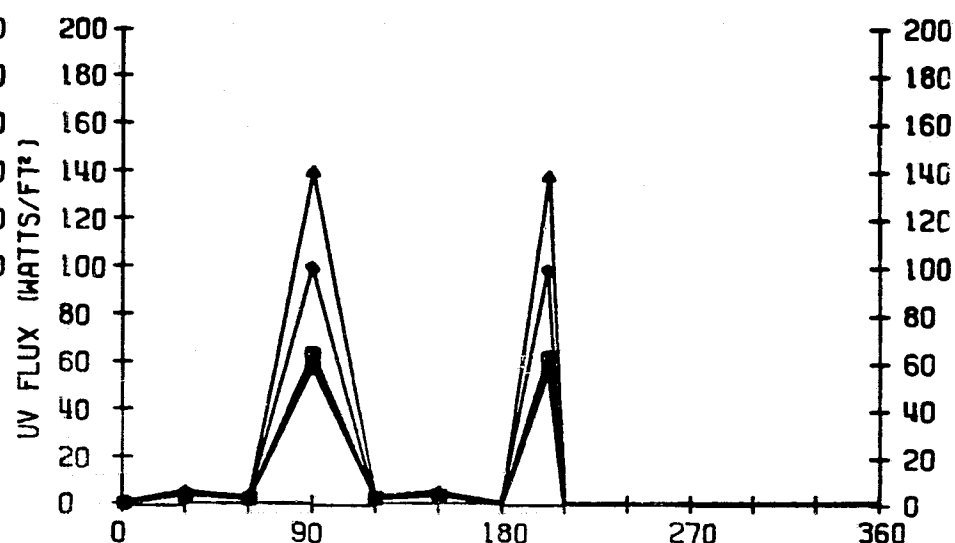
LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)



ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

250 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	8.9	7.3	6.3	11.3	10.6	14.6
R	+Y (○)	8.7	7.1	4.8	12.1	6.1	13.7
F	+Z (△)	0.2	0.1	0.1	2.3	1.3	5.1
L	-X (+)	8.7	7.7	6.7	10.8	6.1	11.5
U	-Y (x)	8.7	7.2	5.0	12.1	6.2	13.8
X	-Z (◇)	14.6	14.6	13.7	15.8	15.0	17.5

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FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 1

Nose to sun, bay facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

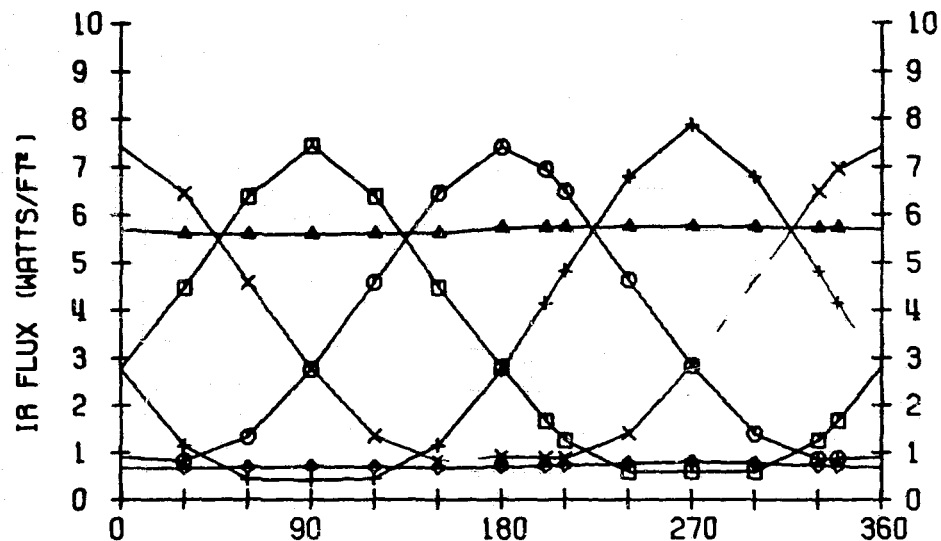
FOR

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

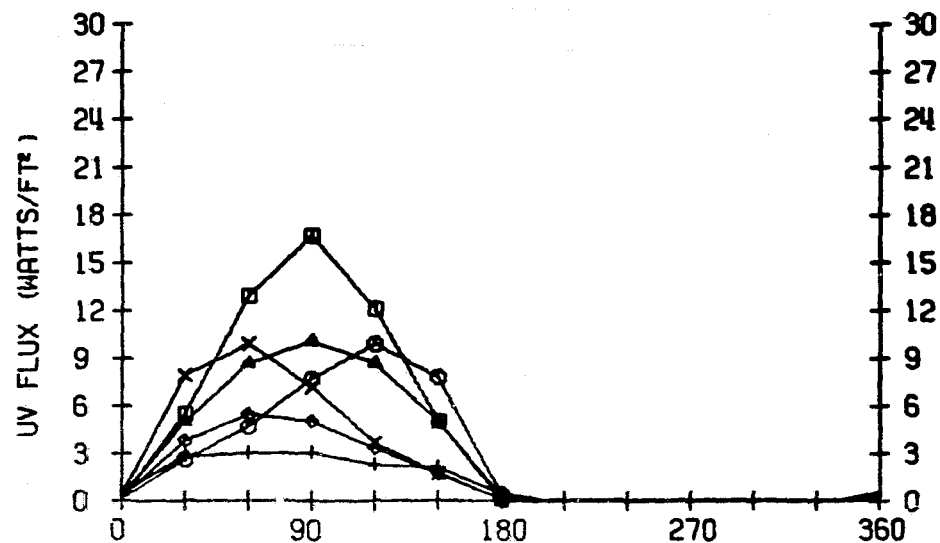
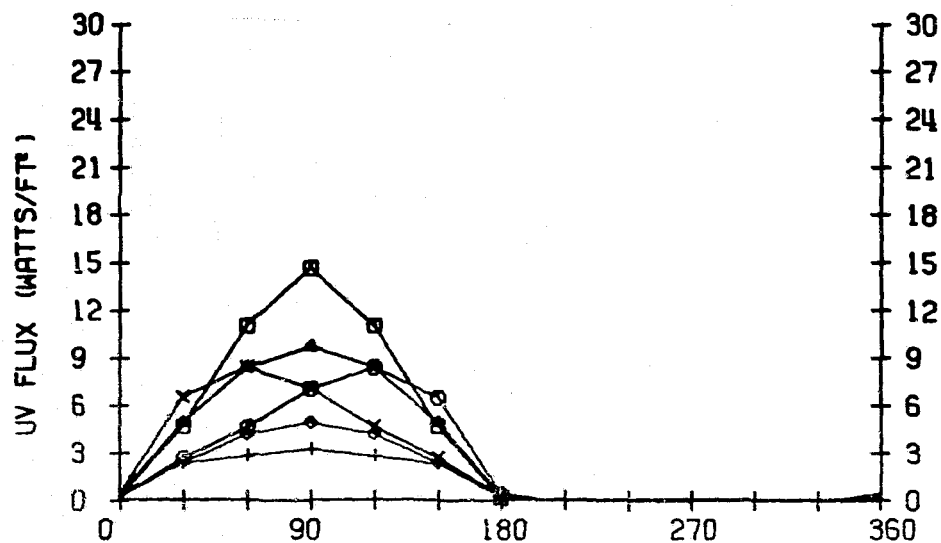
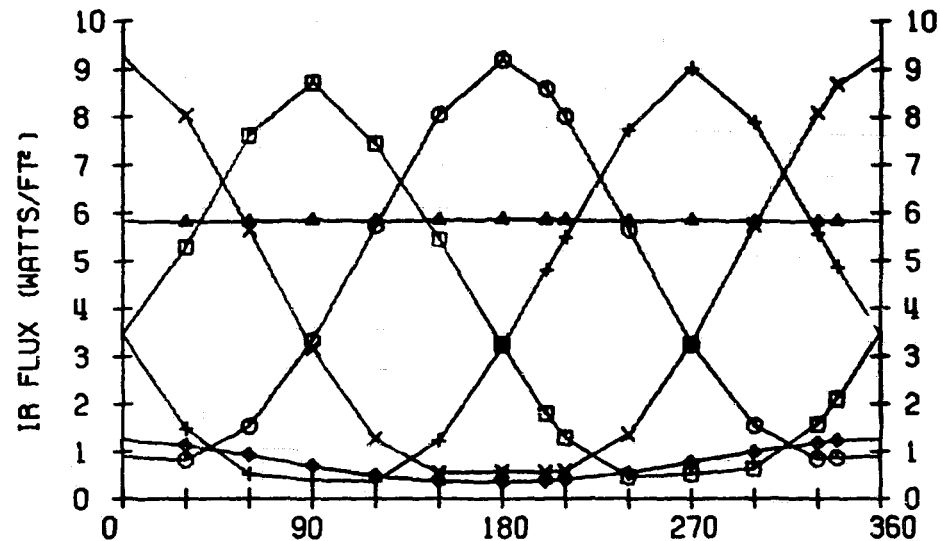
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.3	3.8	4.4	2.2	2.0	0.7
R	+Y (○)	3.4	4.1	5.2	1.8	4.7	1.4
F	+Z (Δ)	5.7	5.8	5.8	4.5	5.2	3.3
L	-X (+)	3.3	3.9	4.6	2.4	4.7	2.5
U	-Y (X)	3.4	4.0	5.2	1.8	4.7	1.4
X	-Z (◇)	0.7	0.8	0.9	0.8	0.8	0.5
U	+X (□)	3.9	4.4	4.8	2.9	1.6	0.7
V	+Y (○)	2.5	2.8	3.1	1.9	2.2	0.9
F	+Z (Δ)	3.1	3.2	3.2	2.6	2.3	1.0
L	-X (+)	1.2	1.2	1.2	1.3	1.0	0.8
U	-Y (X)	2.5	2.6	3.2	1.9	2.2	0.9
X	-Z (◇)	1.5	1.6	1.6	1.6	0.9	0.6

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

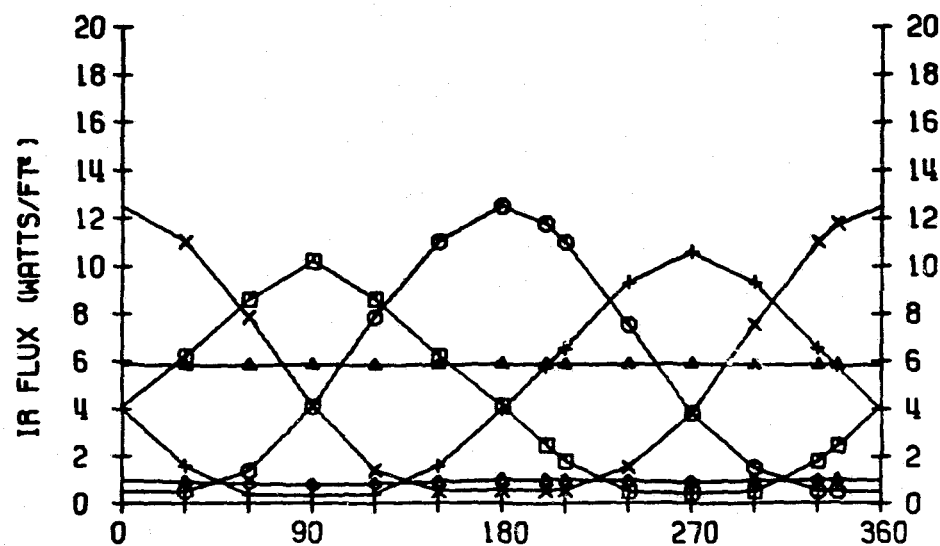


ORBIT POSITION (DEG)

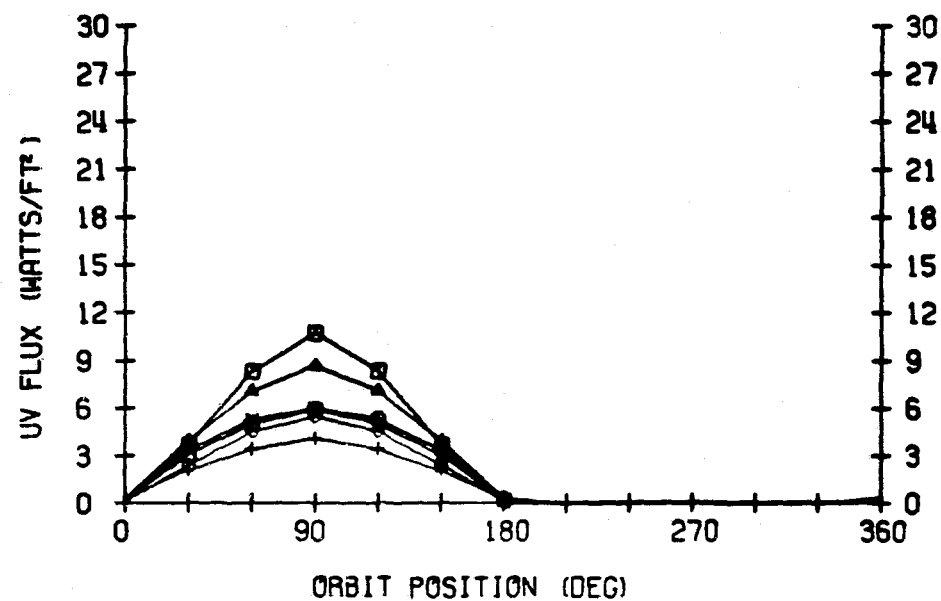
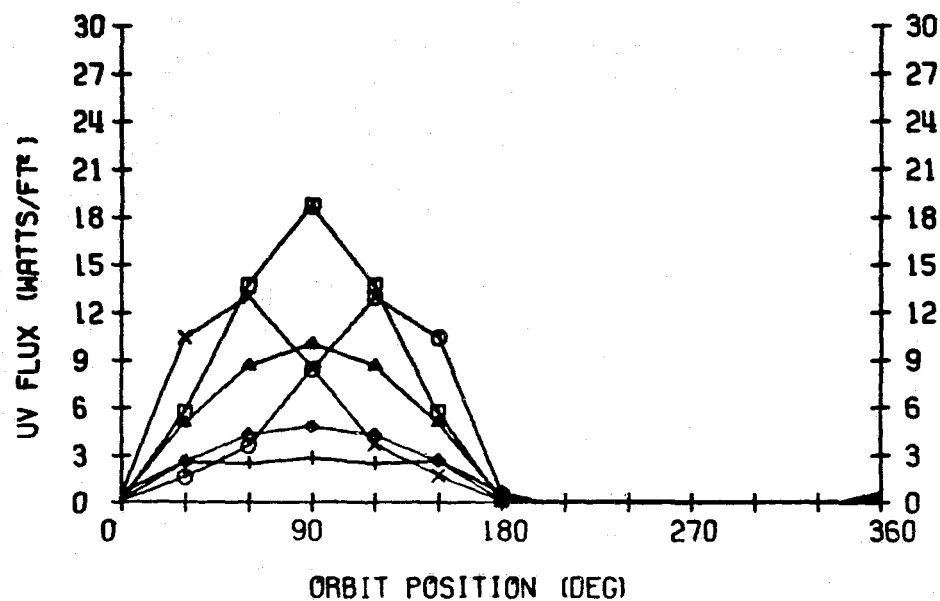
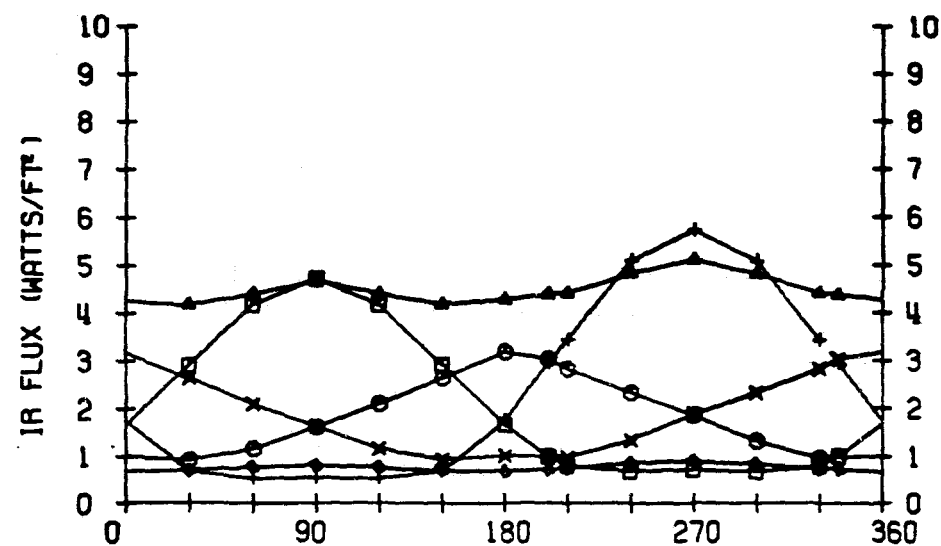
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3

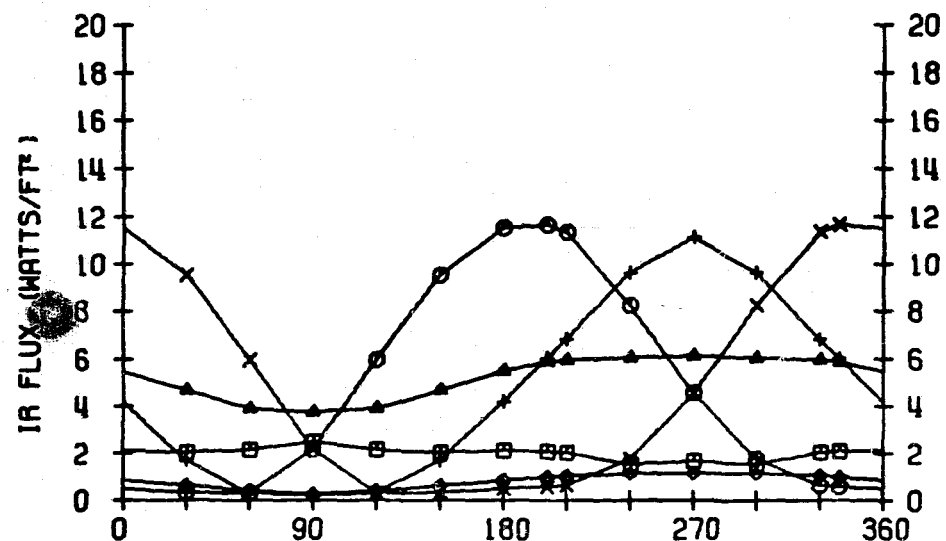


LOCATION 4

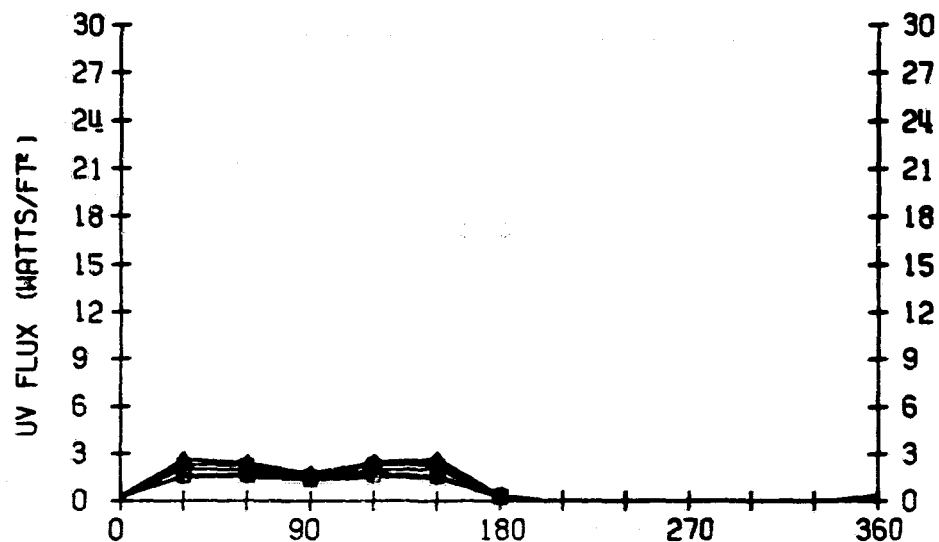
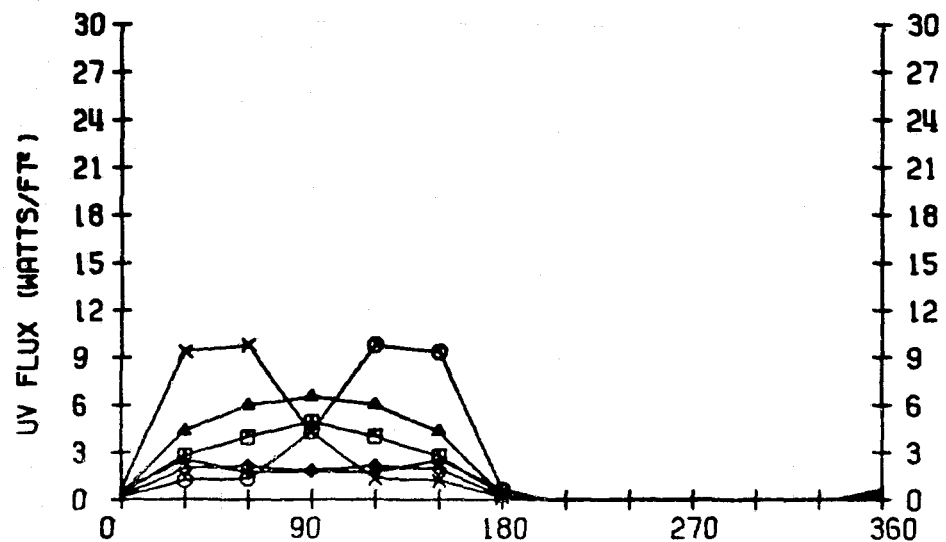
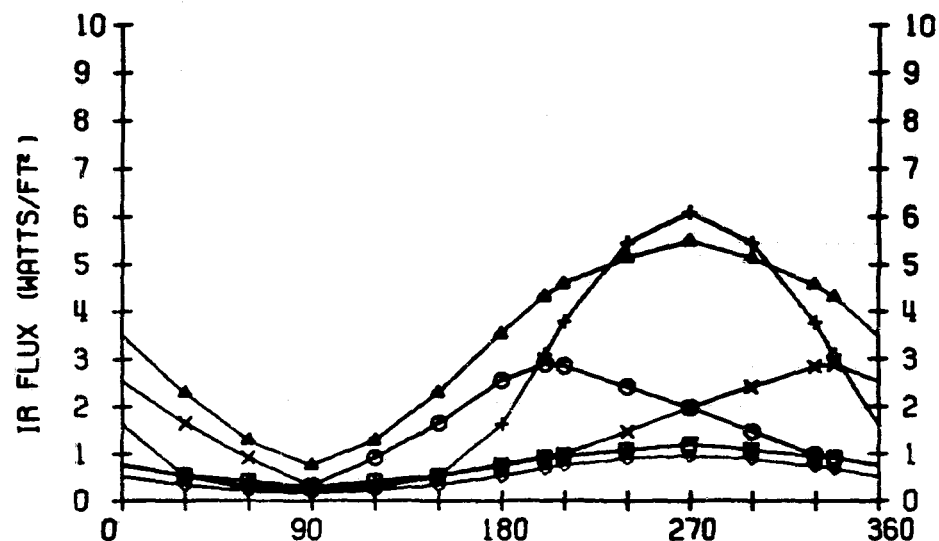


450 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE ° °

	SURFACE DIRECTION	LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
I	+X (□)	3.9	3.6	2.8	4.8	5.2	6.1
R	+Y (○)	4.0	3.5	2.3	5.3	2.8	5.3
F	+Z (△)	0.1	0.1	0.0	1.2	0.7	2.5
L	-X (+)	4.0	3.7	3.2	4.8	2.7	4.4
U	-Y (×)	4.1	3.2	2.4	5.3	2.8	5.4
X	-Z (◇)	6.1	6.6	6.0	6.3	6.1	5.9

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

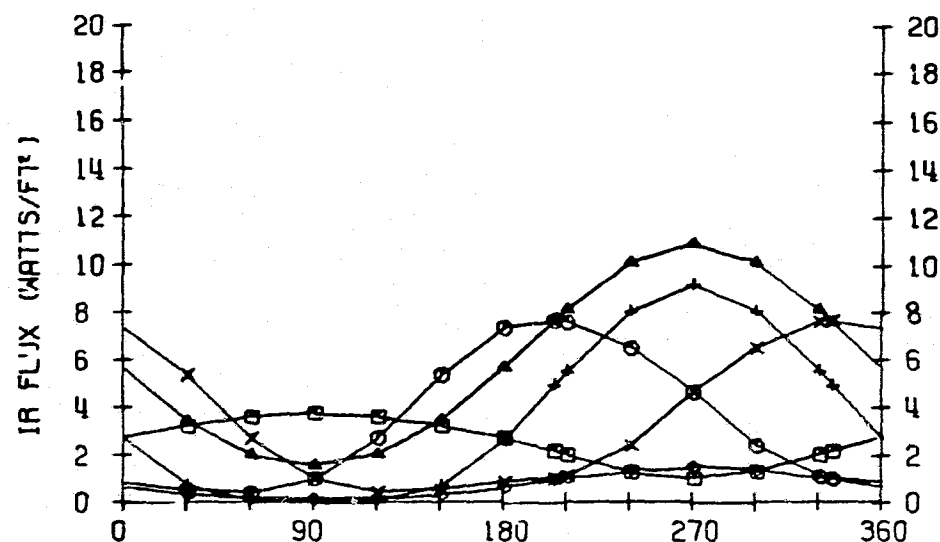
FOR

450 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

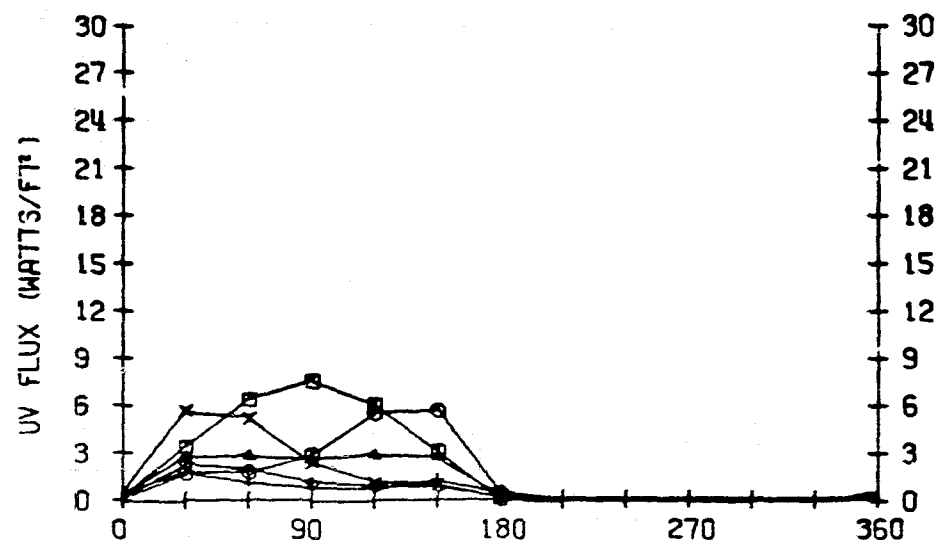
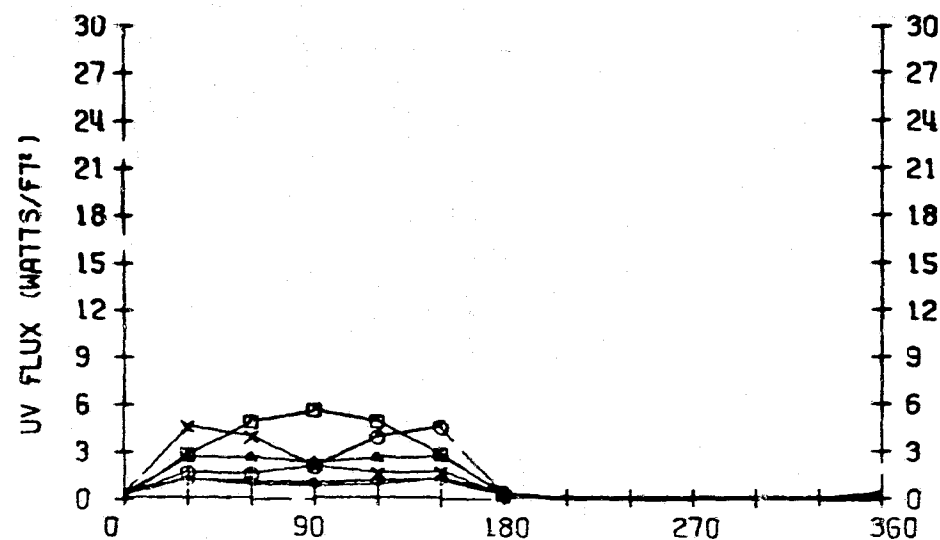
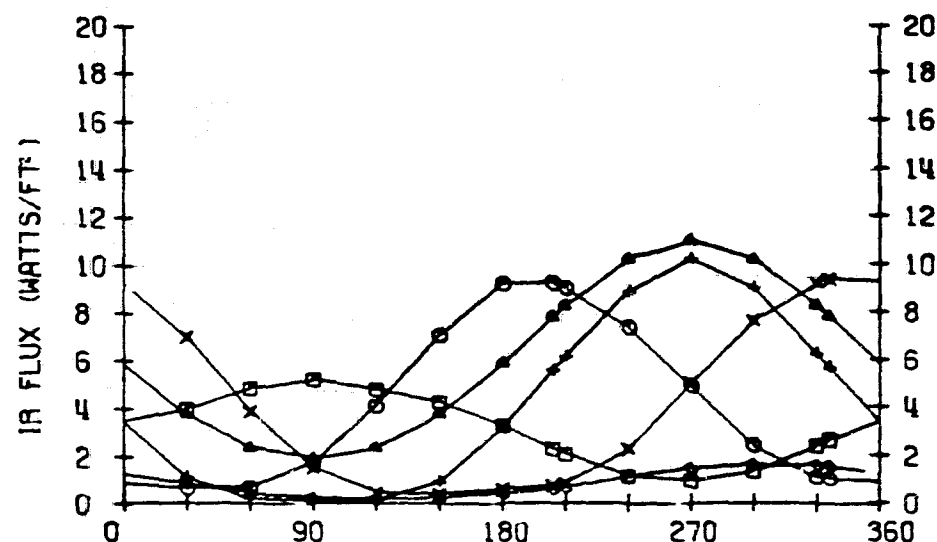
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.6	3.1	3.7	1.6	1.8	0.8
R	+Y (○)	3.4	4.1	5.2	1.9	4.8	1.6
F	+Z (Δ)	6.0	6.1	6.1	4.8	5.7	4.7
L	-X (+)	3.7	4.2	4.8	2.8	5.0	2.9
U	-Y (x)	3.4	4.0	5.2	1.9	4.8	1.6
X	-Z (◇)	0.8	0.8	1.0	0.8	0.9	0.7
U	+X (□)	1.8	2.2	2.7	1.0	0.7	0.2
V	+Y (○)	1.2	1.5	1.9	0.6	1.4	0.3
F	+Z (Δ)	1.1	1.2	1.2	0.7	0.7	0.3
L	-X (+)	0.5	0.6	0.6	0.5	0.5	0.3
U	-Y (x)	1.2	1.3	2.0	0.6	1.4	0.3
X	-Z (◇)	0.5	0.6	0.6	0.4	0.4	0.2

450 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

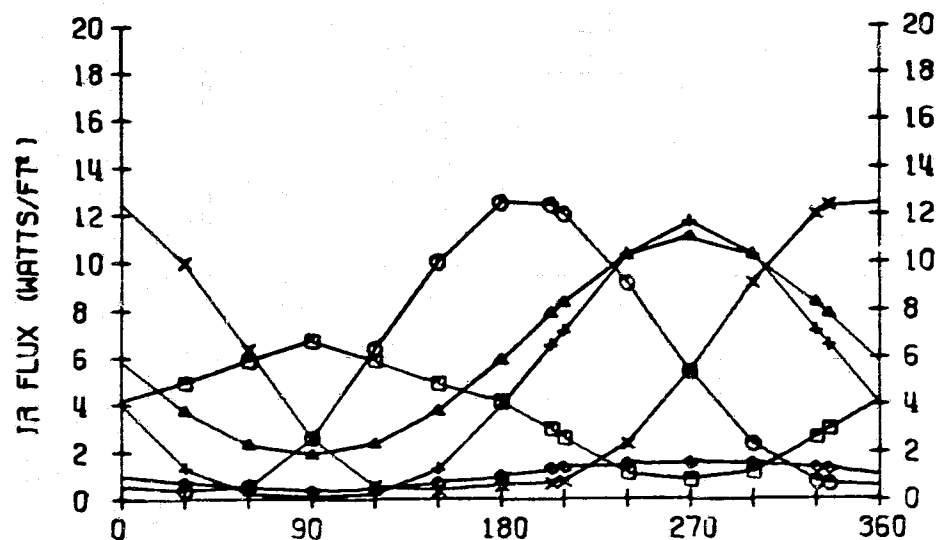


ORBIT POSITION (DEG)

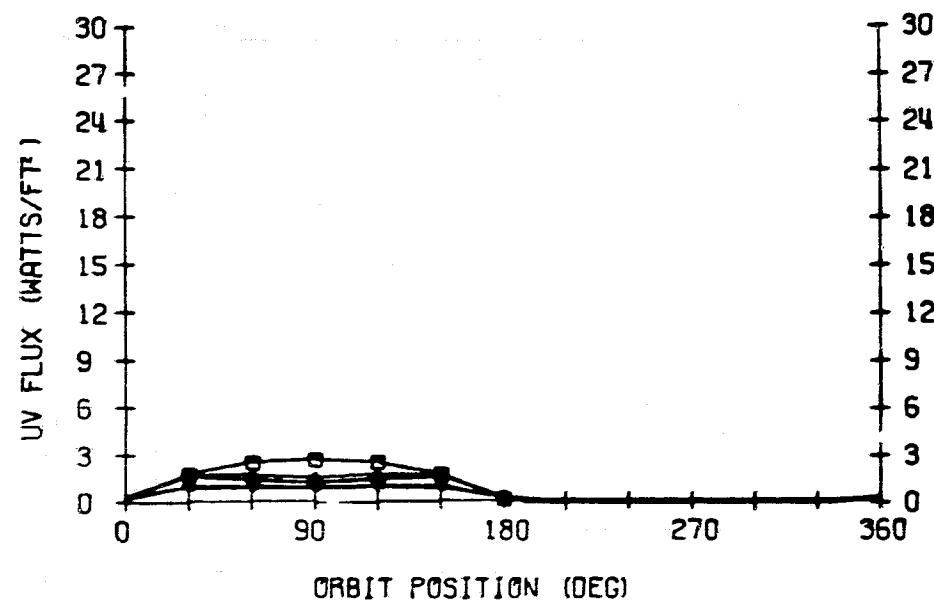
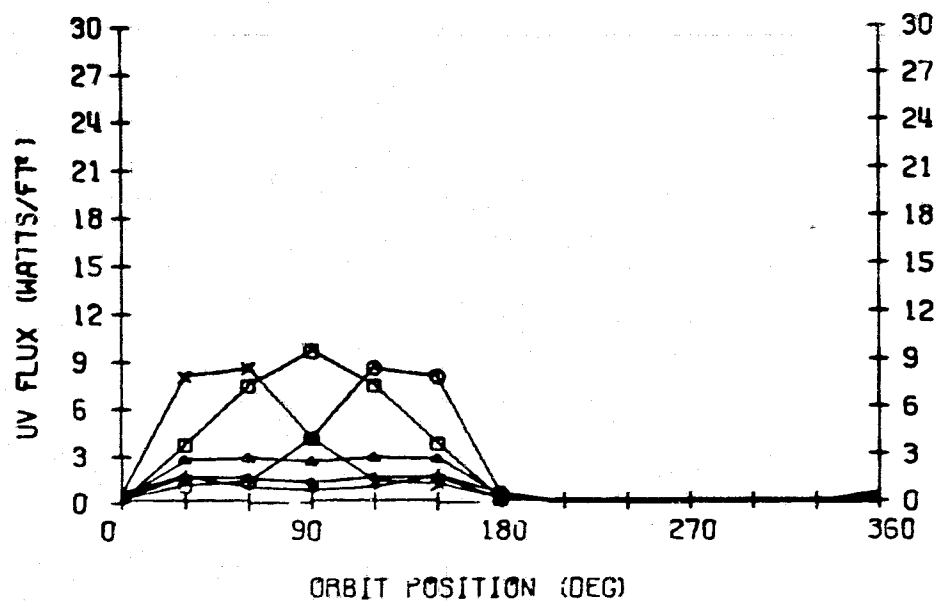
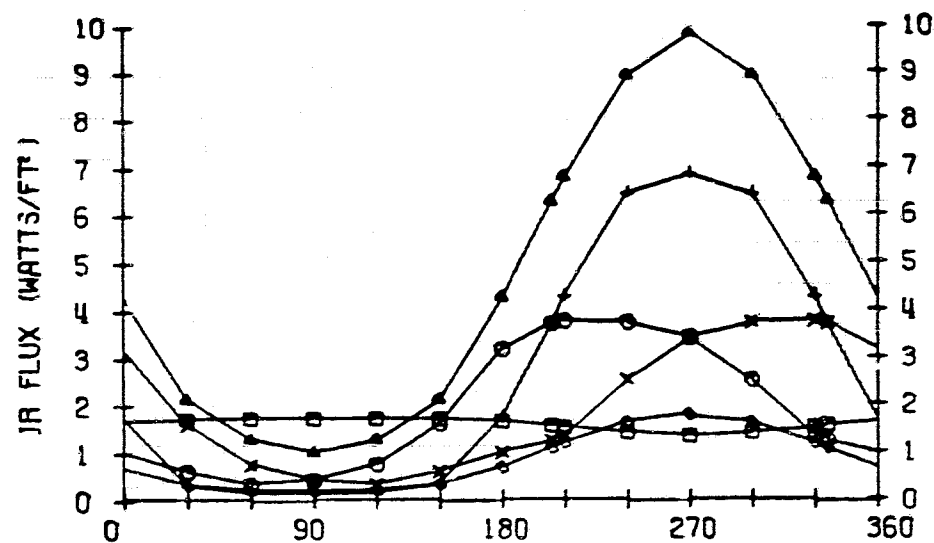
ORBIT POSITION (DEG)

450 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3

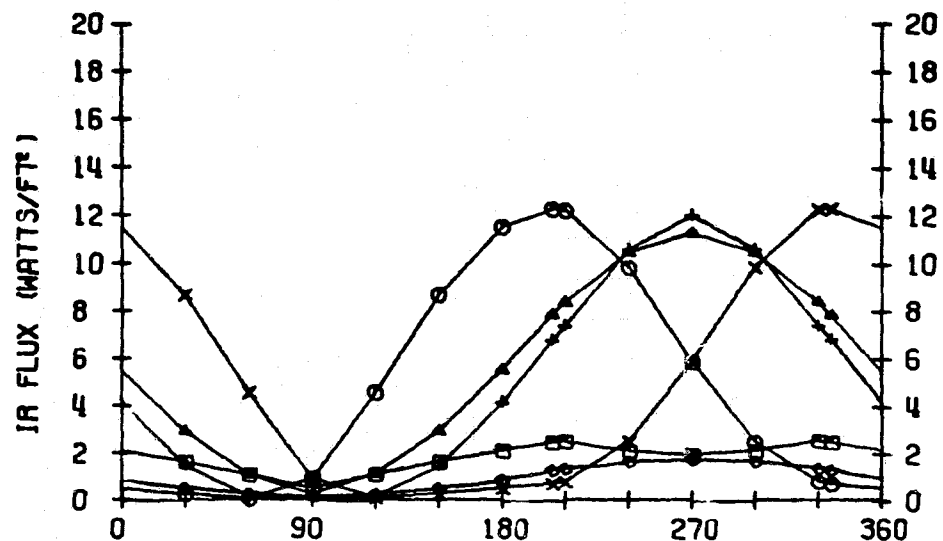


LOCATION 4

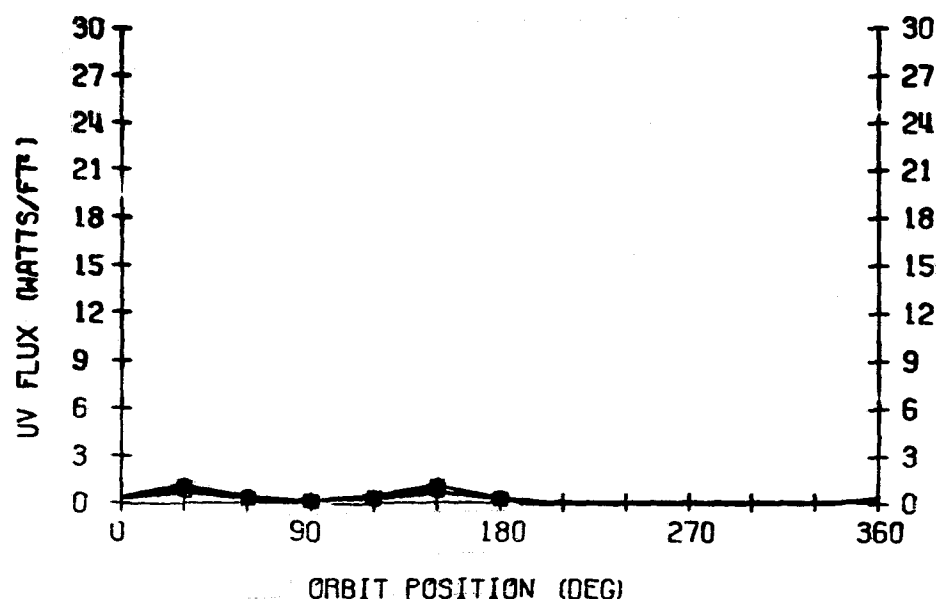
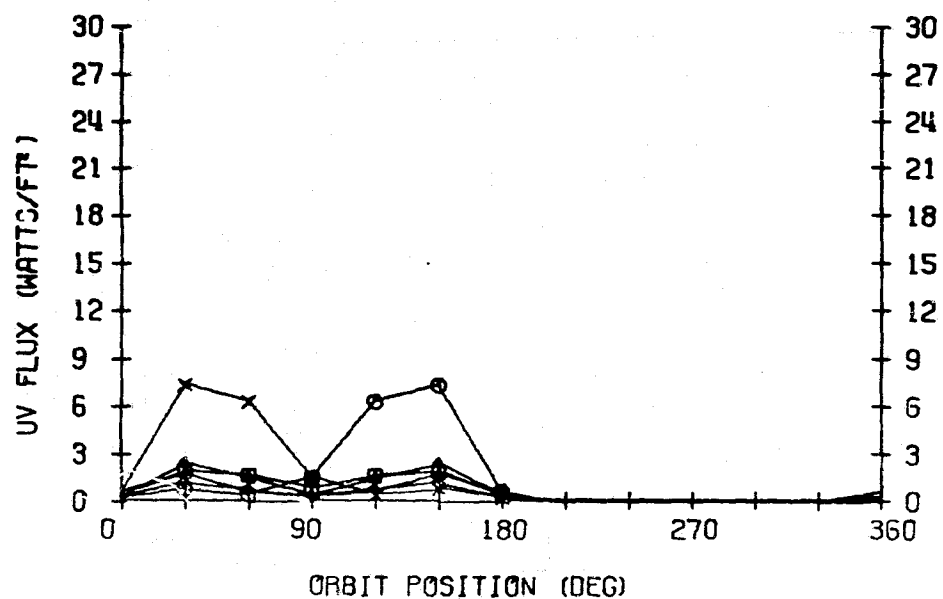
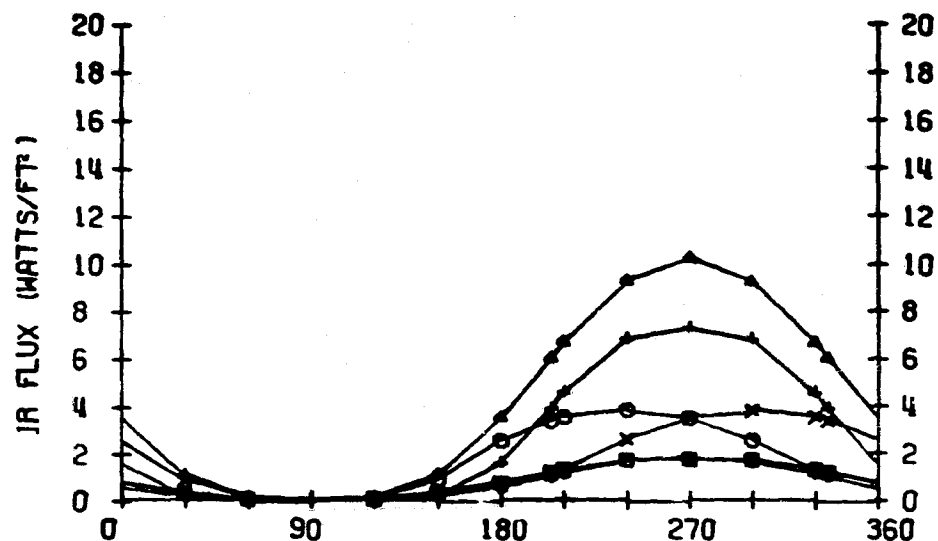


450 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=30 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.7	3.3	2.7	4.4	5.3	6.4
R	+Y (○)	3.6	3.2	2.1	4.8	2.8	5.5
F	+Z (△)	0.1	0.1	0.0	1.1	0.7	2.5
L	-X (+)	3.5	3.3	2.8	4.2	2.5	4.5
U	-Y (X)	3.7	2.9	2.2	4.8	2.8	5.6
X	-Z (◇)	5.5	6.0	5.5	5.7	6.2	6.4

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

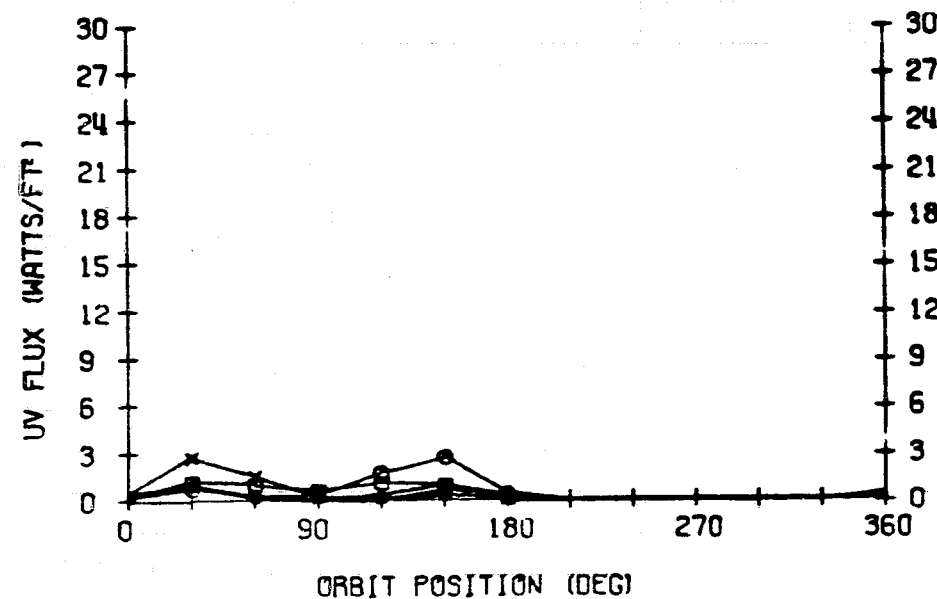
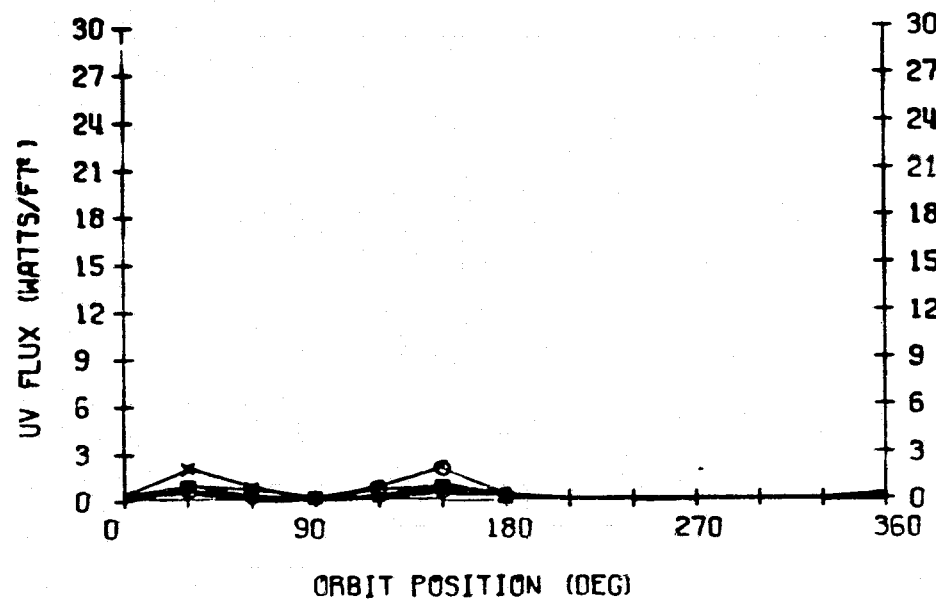
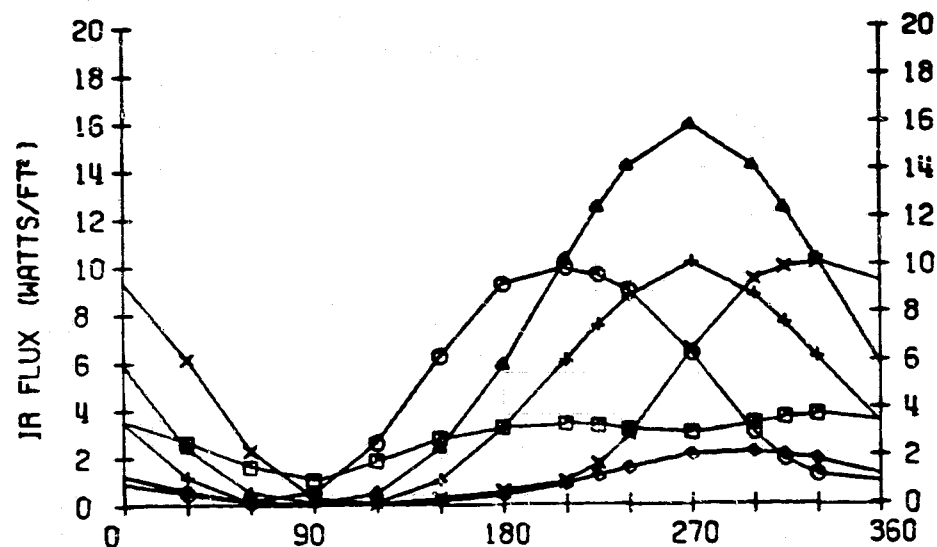
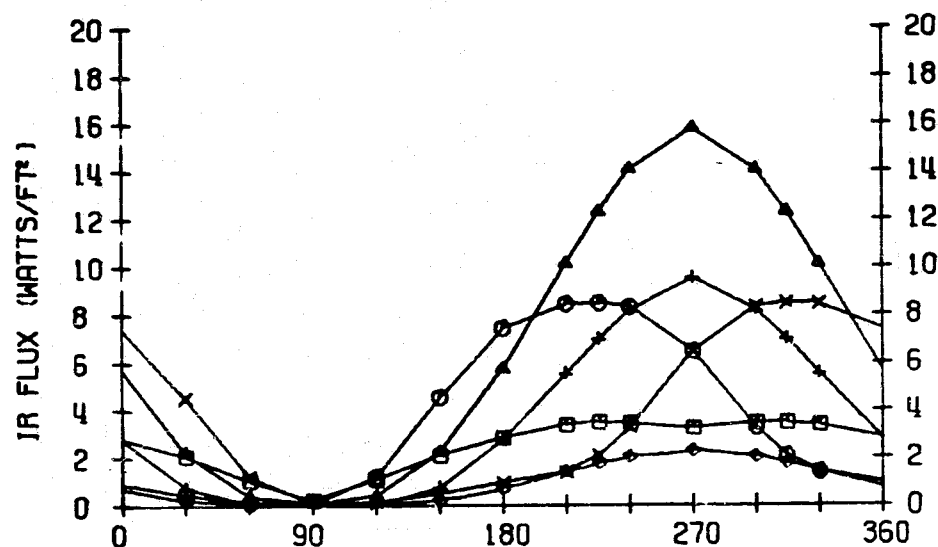
450 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.4	2.8	3.3	1.7	2.1	1.0
R	+Y (○)	3.5	4.1	5.2	2.1	4.9	1.8
F	+Z (Δ)	6.7	6.8	6.8	5.6	6.7	5.0
L	-X (+)	3.7	4.1	4.6	2.8	4.8	2.9
U	-Y (x)	3.5	4.1	5.2	2.1	4.9	1.8
X	-Z (◇)	0.9	0.9	1.1	1.0	1.0	0.8
U	+X (□)	0.3	0.4	0.6	0.1	0.4	0.1
V	+Y (○)	0.4	0.5	0.8	0.1	0.8	0.1
F	+Z (Δ)	0.2	0.3	0.3	0.1	0.2	0.1
L	-X (+)	0.2	0.3	0.3	0.1	0.4	0.1
U	-Y (x)	0.4	0.5	0.8	0.1	0.8	0.1
X	-Z (◇)	0.1	0.2	0.2	0.1	0.2	0.1

450 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

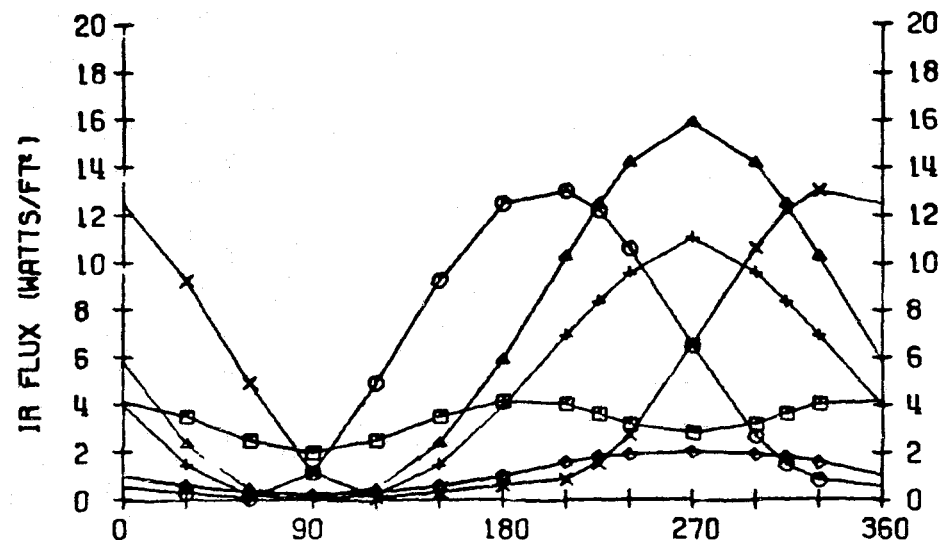
LOCATION 1

LOCATION 2

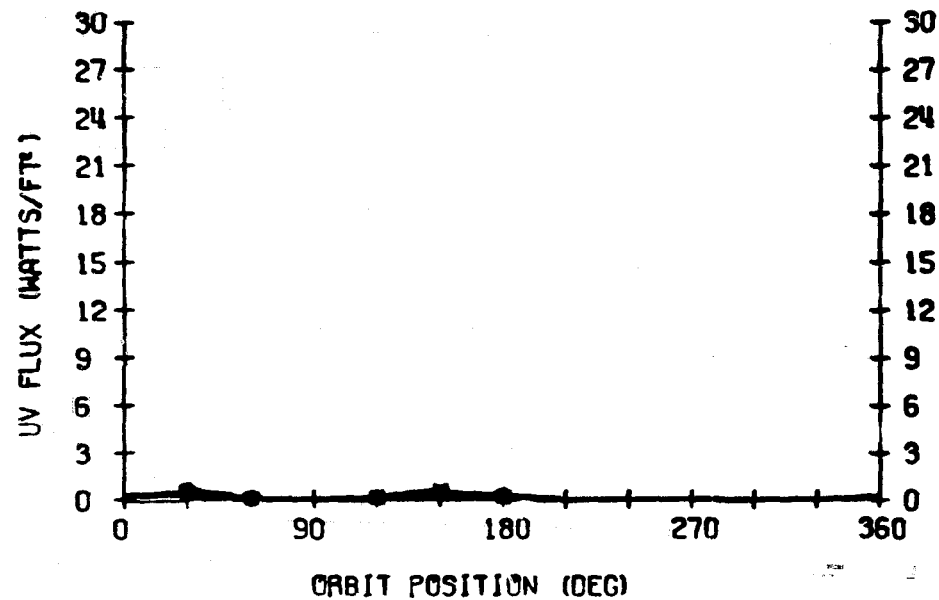
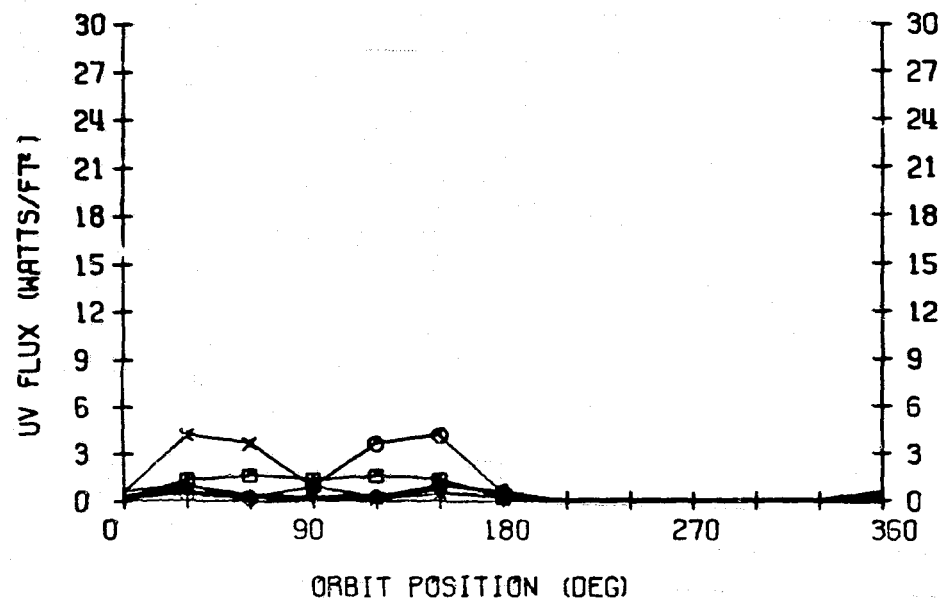
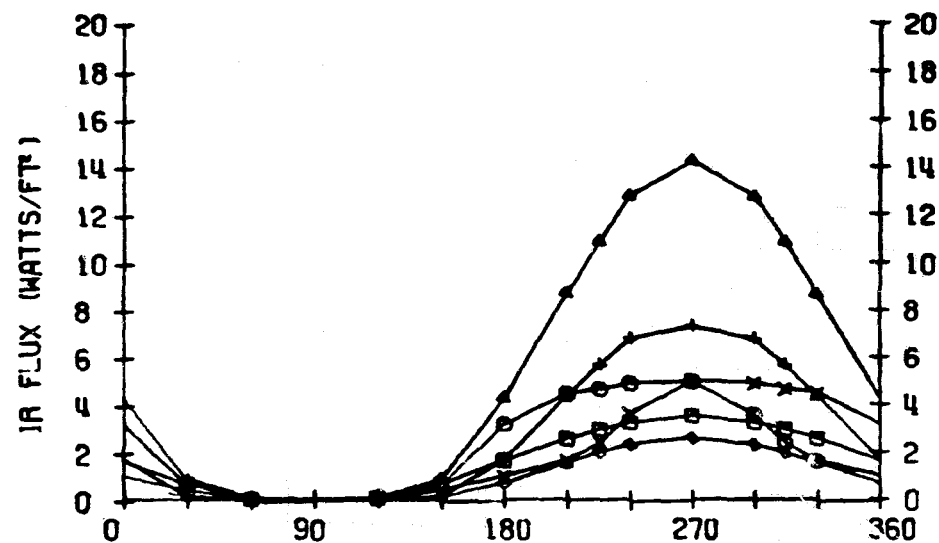


450 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3

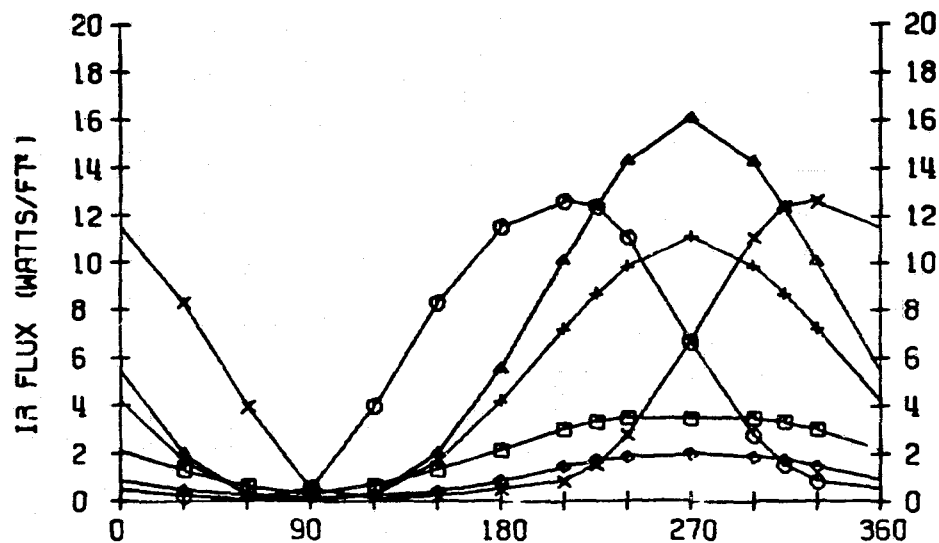


LOCATION 4

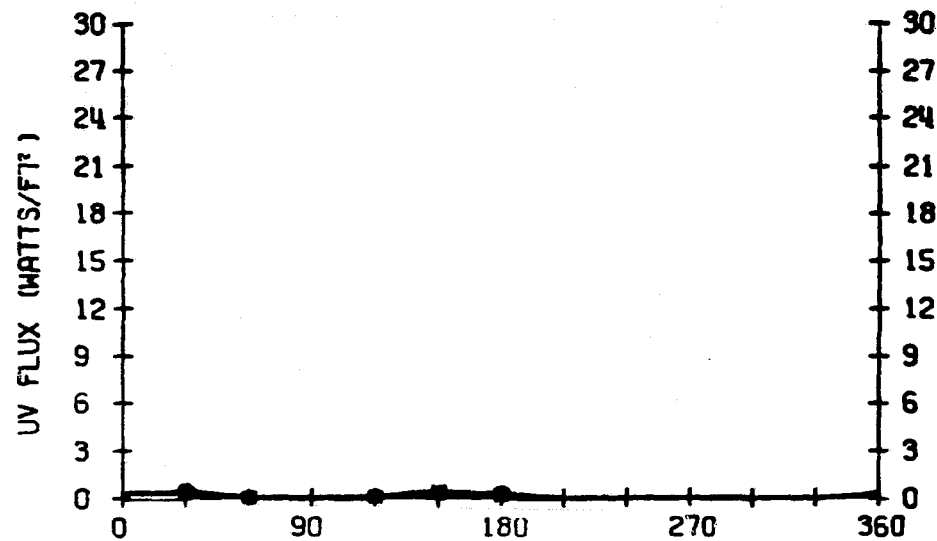
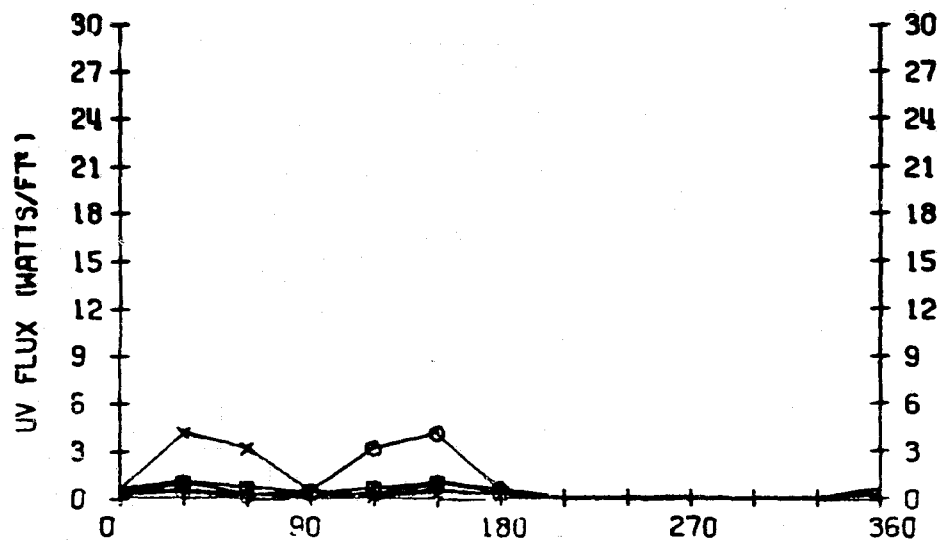
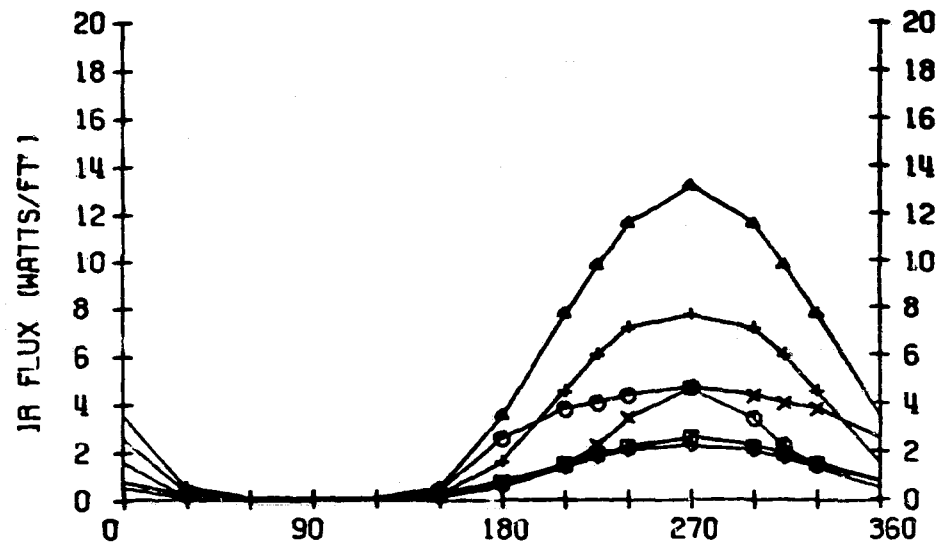


450 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=60 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.9	3.5	2.8	4.8	5.3	6.6
R	+Y (○)	3.8	3.2	2.2	5.0	2.9	5.9
F	+Z (△)	0.1	0.1	0.0	1.1	0.7	2.5
L	-X (+)	3.6	3.3	2.8	4.4	2.7	4.8
U	-Y (X)	3.9	3.1	2.3	5.1	2.9	6.0
X	-Z (◇)	5.9	6.2	5.8	6.2	6.6	7.0

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

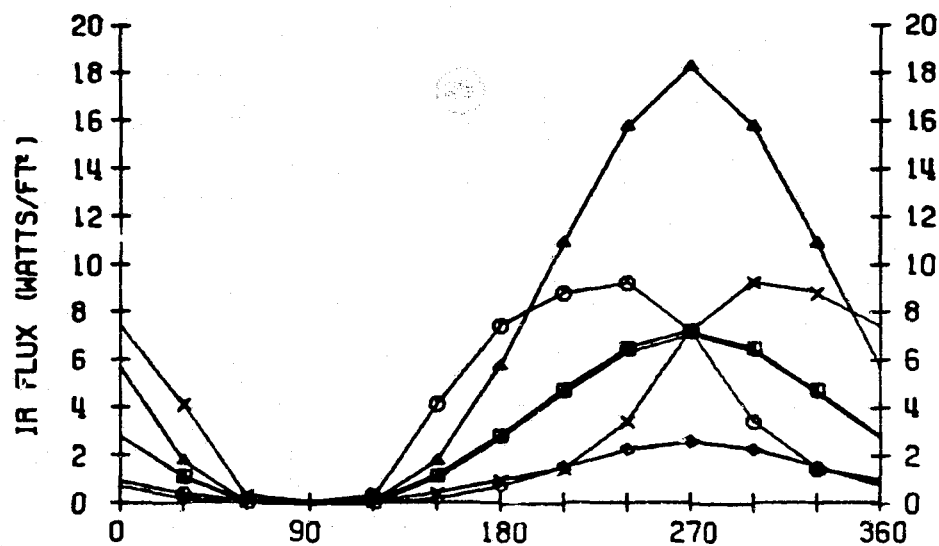
FOR

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

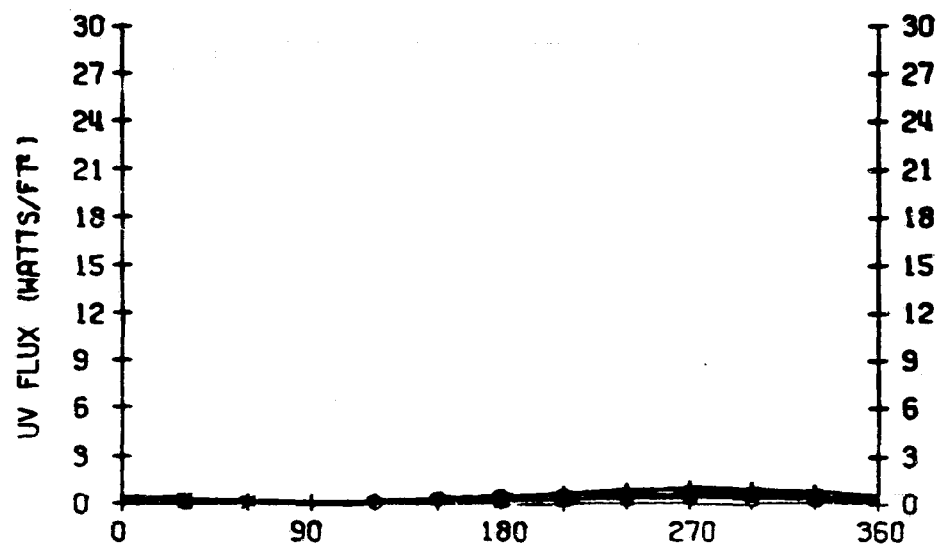
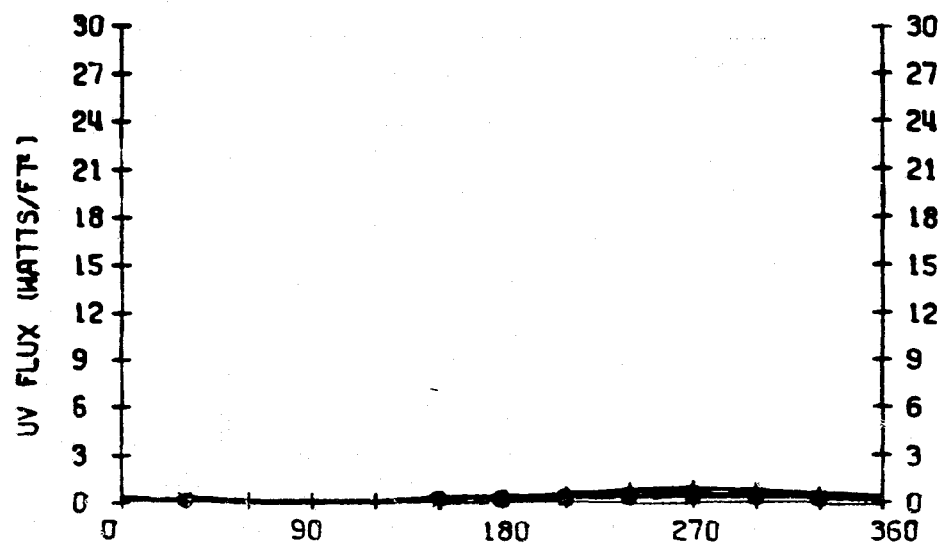
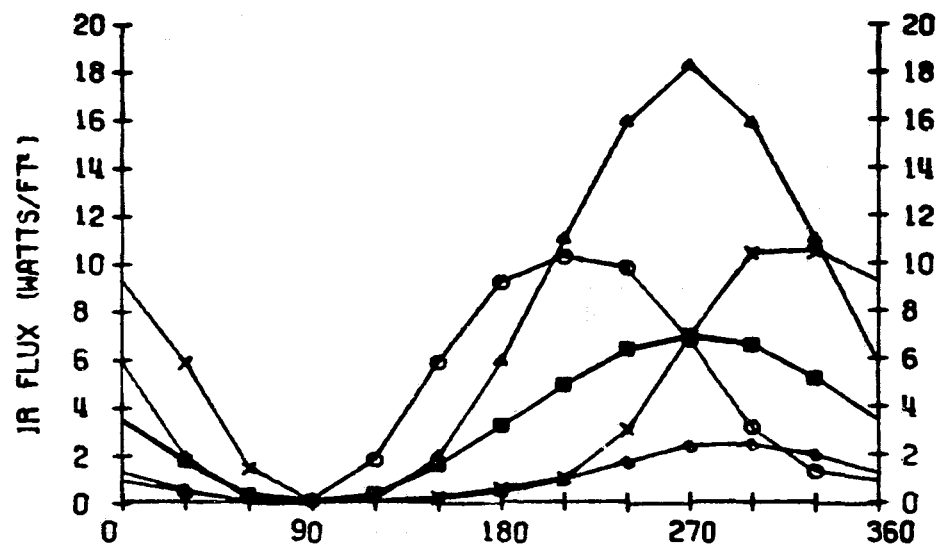
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.1	3.4	3.9	2.4	2.1	1.0
R	+Y (○)	3.6	4.1	5.2	2.2	4.8	1.7
F	+Z (Δ)	7.2	7.3	7.3	6.1	6.8	4.8
L	-X (+)	3.1	3.4	3.9	2.5	3.9	2.4
U	-Y (X)	3.6	4.1	5.2	2.2	4.8	1.7
X	-Z (◇)	1.0	1.0	1.1	1.1	0.9	0.8
U	+X (□)	0.1	0.1	0.1	0.2	0.3	0.3
V	+Y (○)	0.2	0.3	0.3	0.2	0.4	0.3
F	+Z (Δ)	0.3	0.3	0.3	0.3	0.4	0.4
L	-X (+)	0.5	0.5	0.6	0.4	0.6	0.4
U	-Y (X)	0.2	0.3	0.3	0.2	0.4	0.3
X	-Z (◇)	0.2	0.2	0.2	0.2	0.3	0.3

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

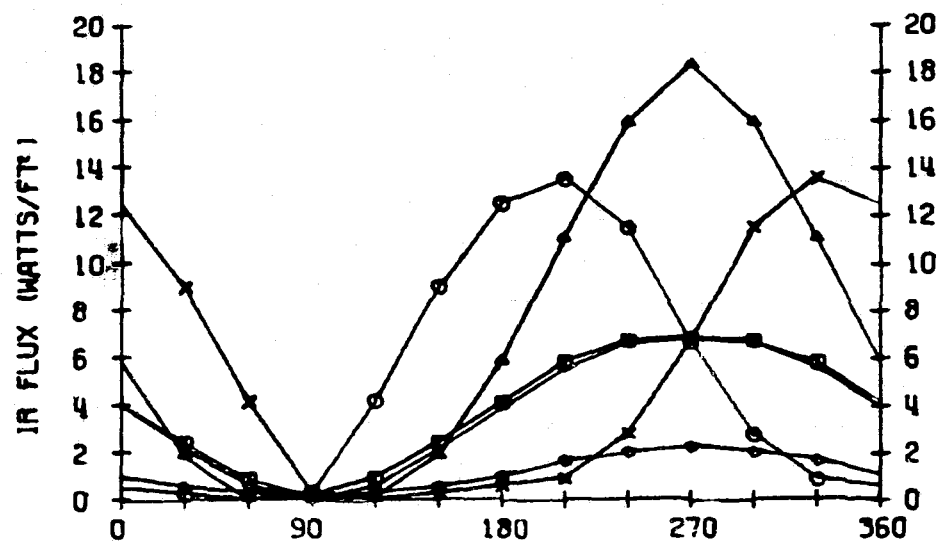


ORBIT POSITION (DEG)

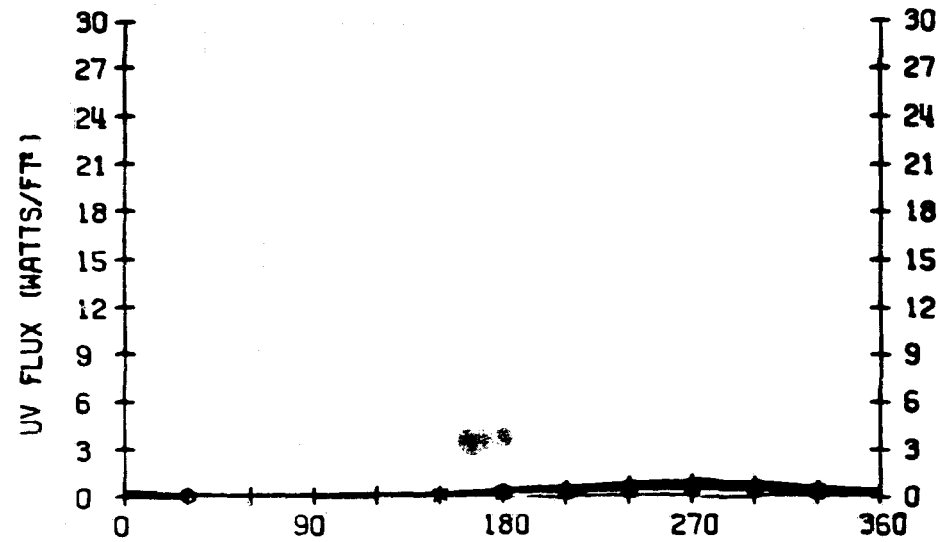
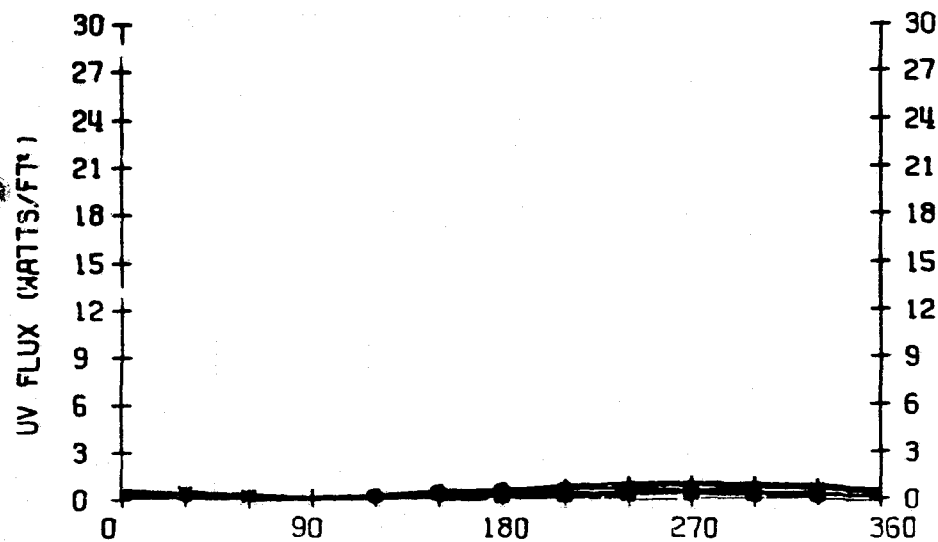
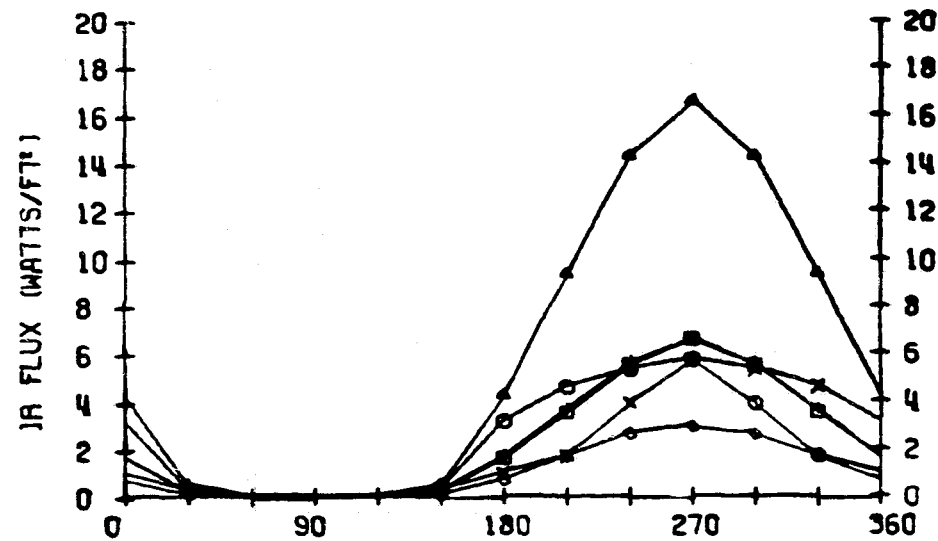
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

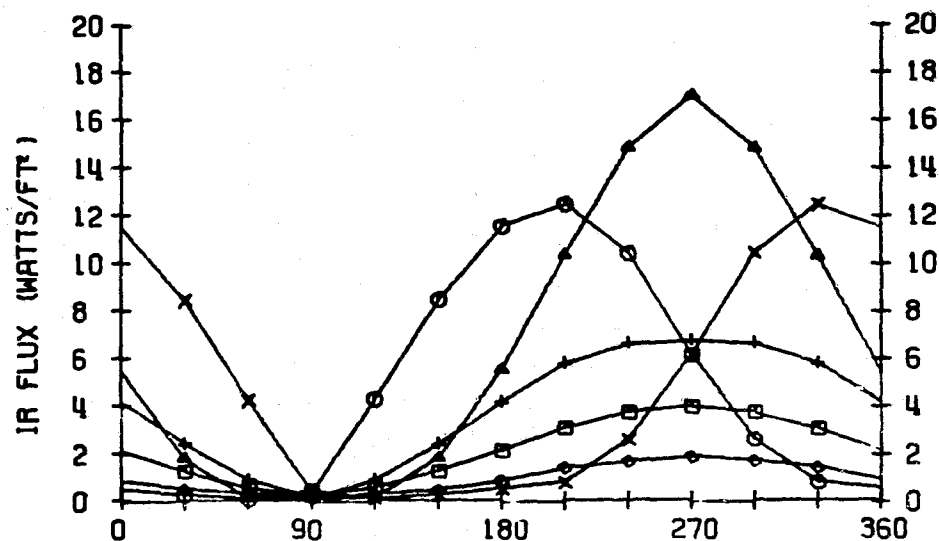


ORBIT POSITION (DEG)

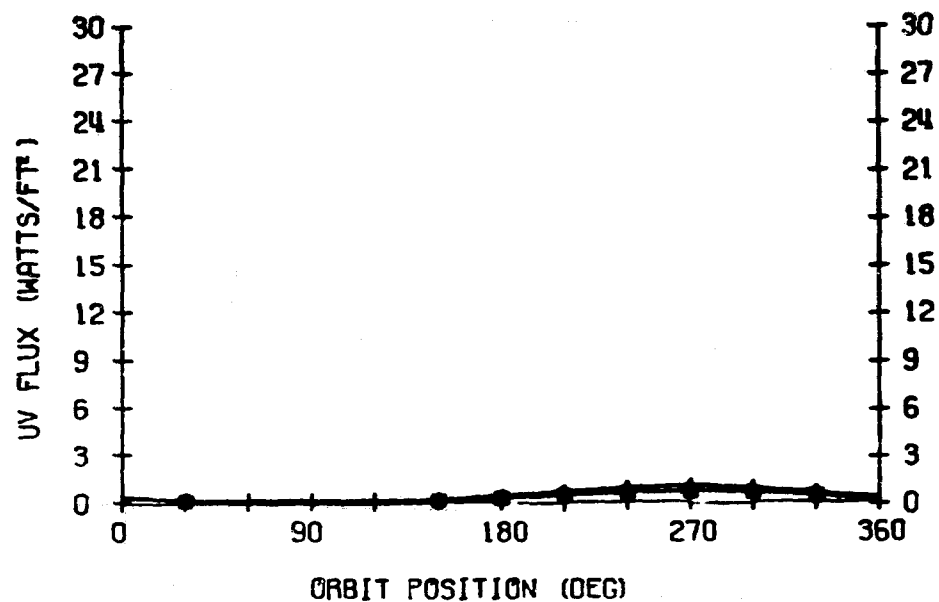
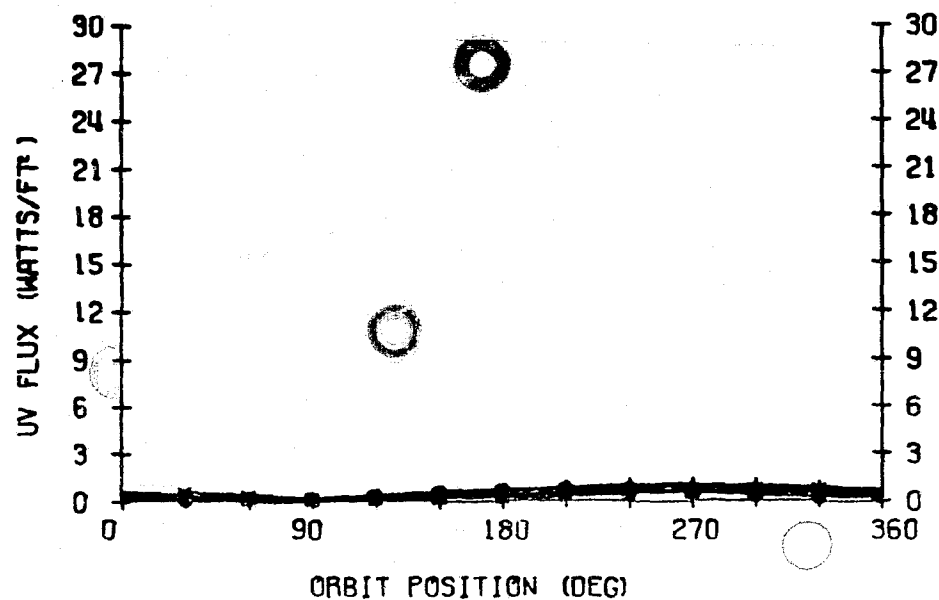
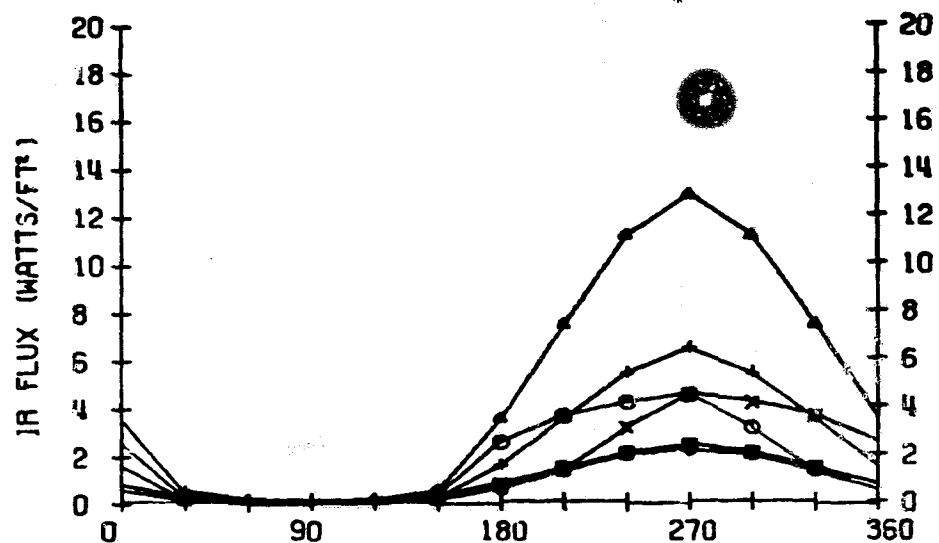
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	4.0	3.6	2.8	5.0	5.0	6.3
R	+Y (○)	4.0	3.4	2.3	5.4	2.8	5.7
F	+Z (△)	0.1	0.1	0.1	1.1	0.6	2.4
L	-X (+)	3.8	3.5	3.1	4.7	2.8	4.8
U	-Y (X)	4.1	3.3	2.4	5.5	2.8	5.8
X	-Z (◇)	6.4	6.6	6.1	6.8	6.4	6.8

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

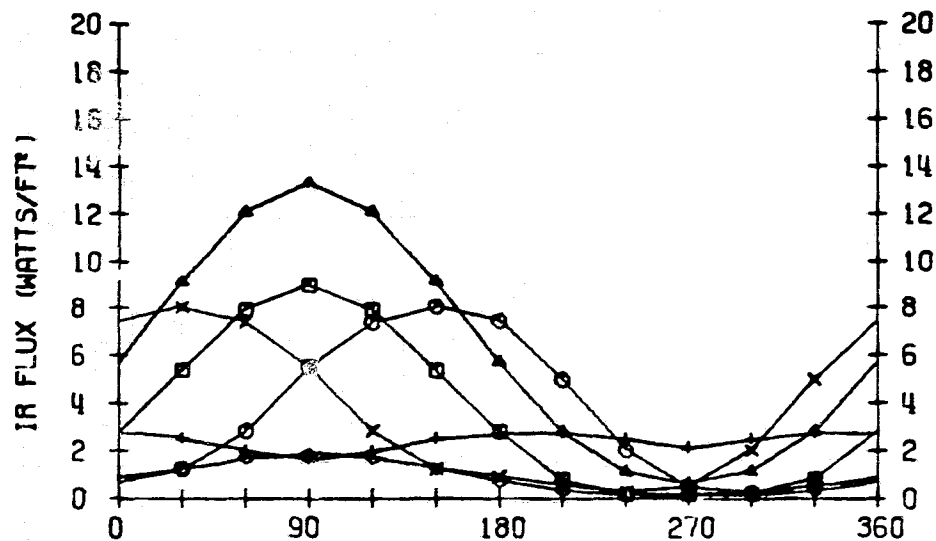
FOR

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

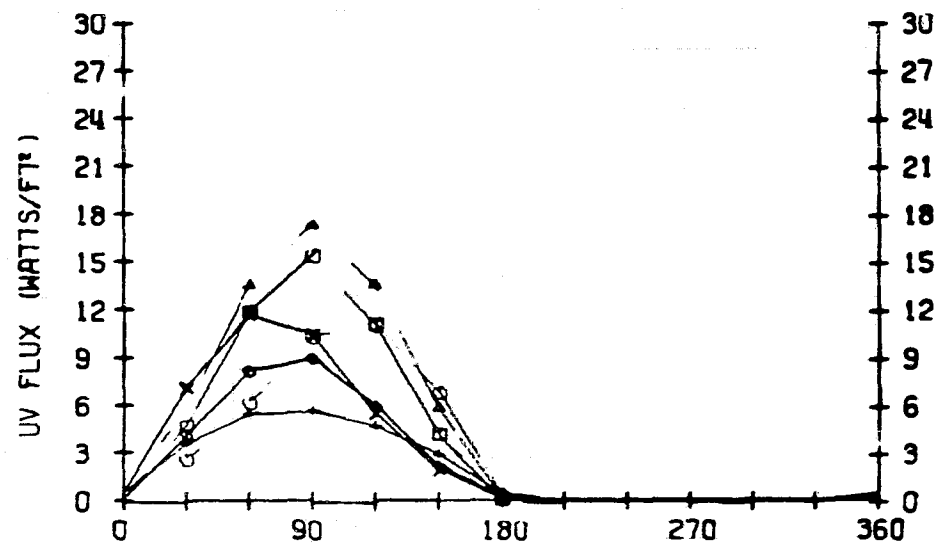
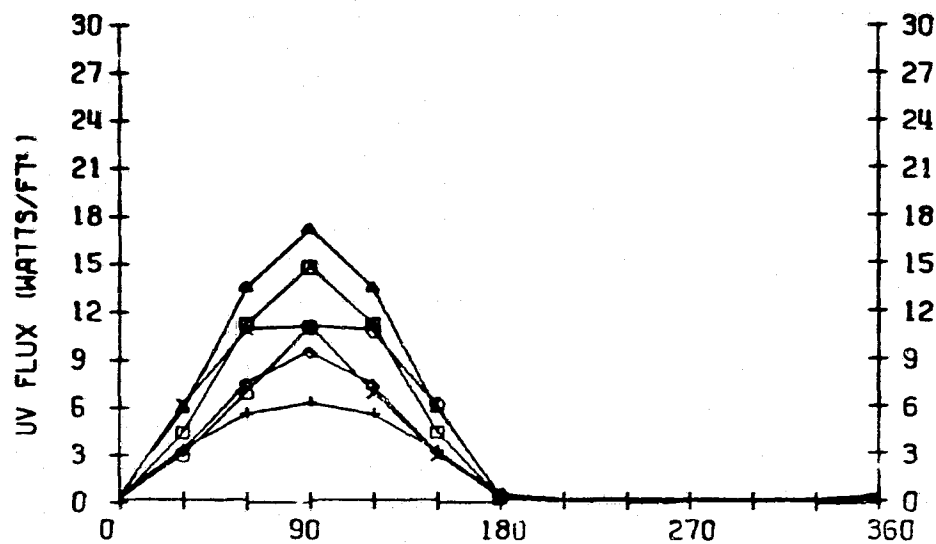
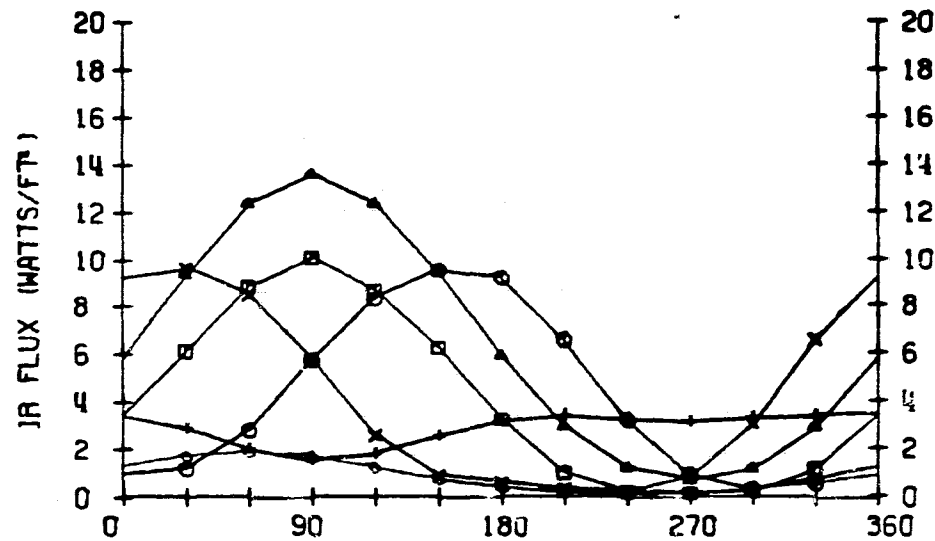
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.6	4.1	4.7	2.5	2.1	0.8
R	+Y (○)	3.5	4.1	5.2	1.9	4.7	1.4
F	+Z (Δ)	6.3	6.4	6.4	5.1	5.7	3.7
L	-X (+)	2.4	2.8	3.5	1.6	3.6	1.6
U	-Y (x)	3.5	4.0	5.2	1.9	4.7	1.4
X	-Z (◇)	0.8	0.8	1.0	0.9	0.8	0.6
U	+X (□)	3.8	4.0	4.1	3.5	2.0	1.7
V	+Y (○)	3.2	3.2	3.2	3.0	2.6	2.2
F	+Z (Δ)	4.7	4.7	4.7	4.3	4.2	3.2
L	-X (+)	2.1	2.0	2.0	2.3	1.8	1.9
U	-Y (x)	3.2	3.1	3.2	3.0	2.6	2.2
X	-Z (◇)	2.5	2.5	2.4	2.8	1.8	2.0

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

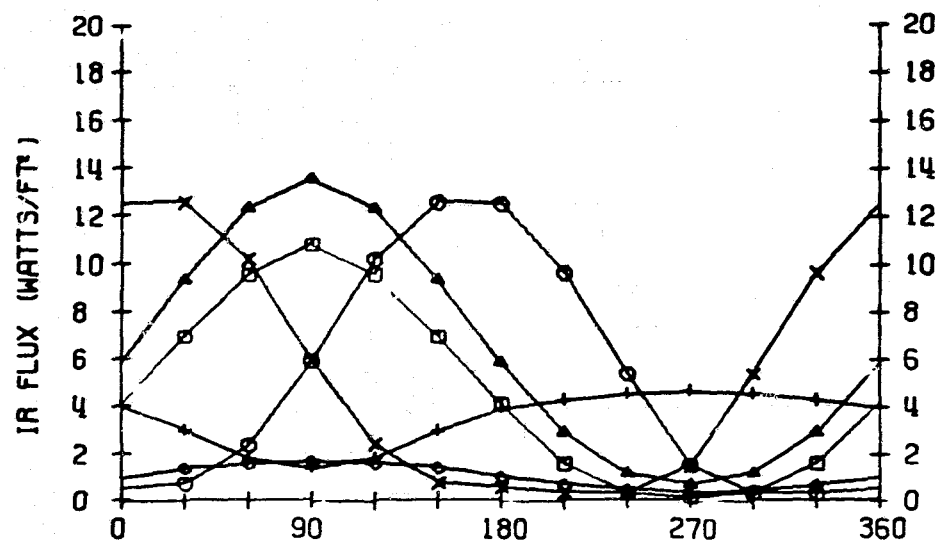


ORBIT POSITION (DEG)

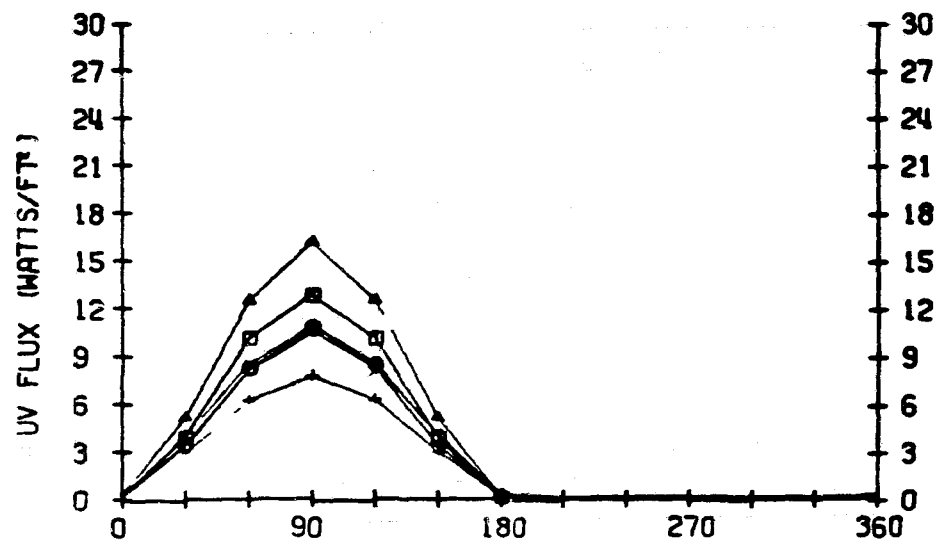
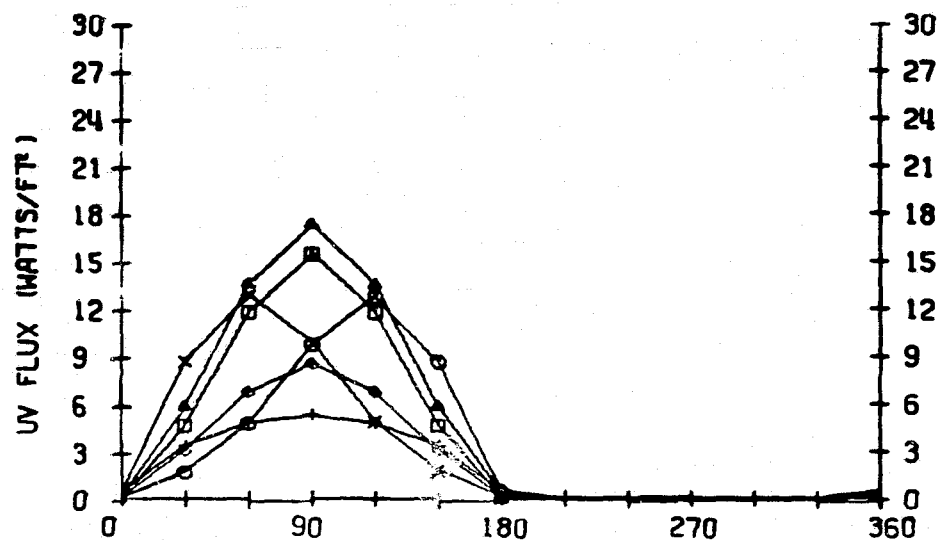
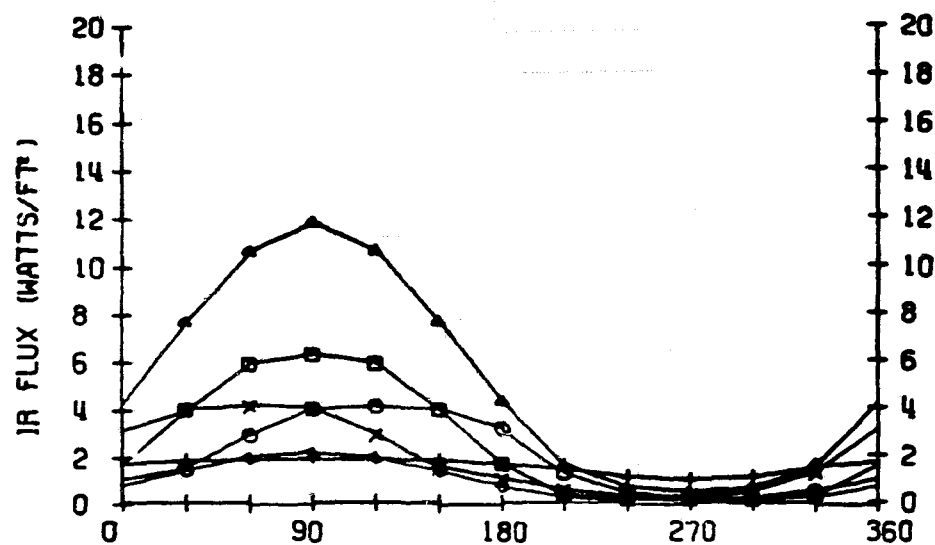
ORBIT POSITION (DEG)

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

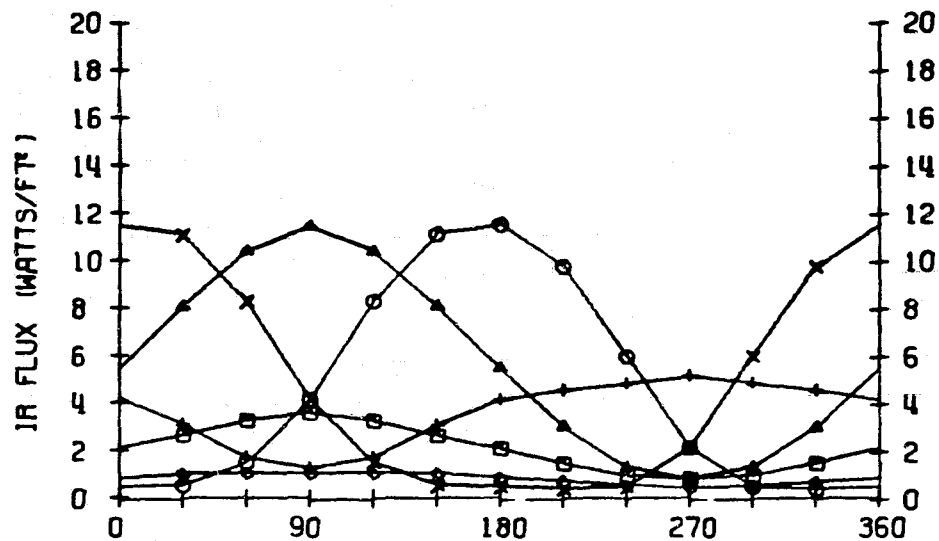


ORBIT POSITION (DEG)

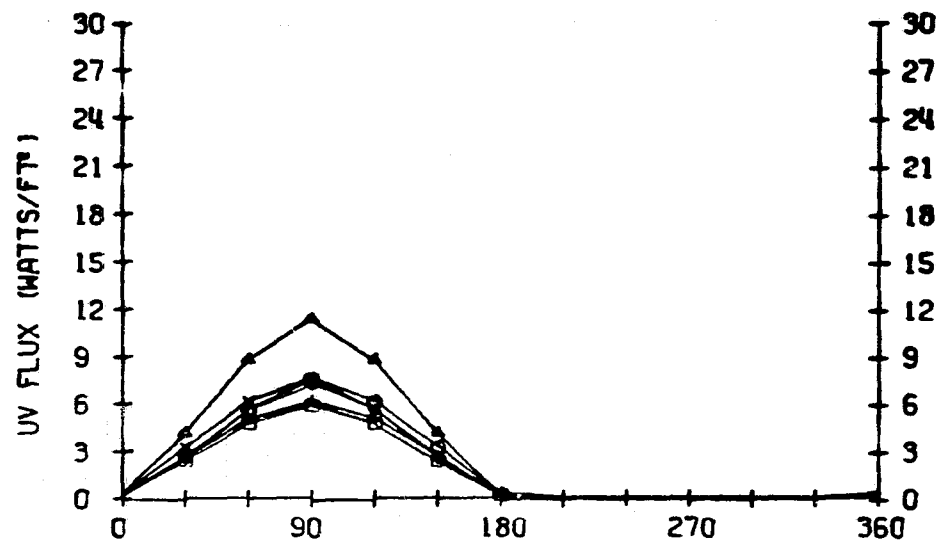
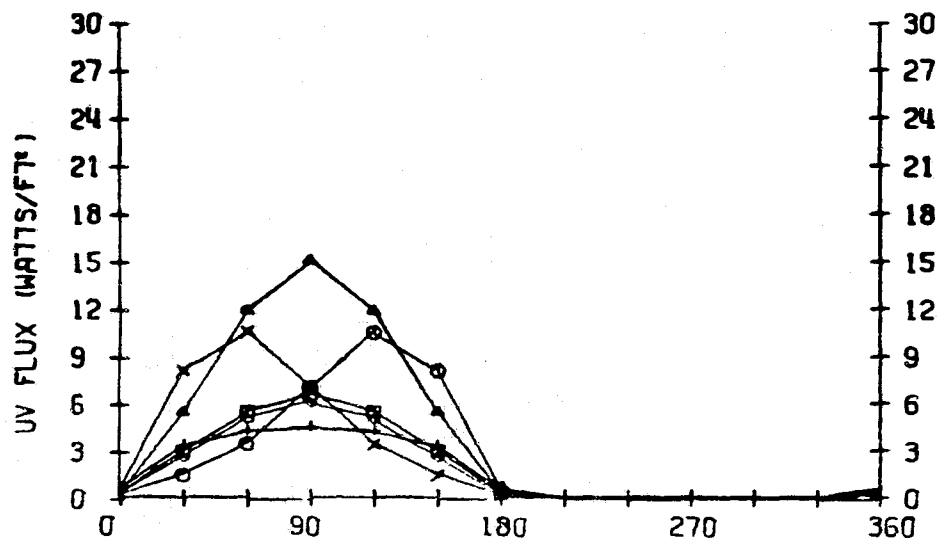
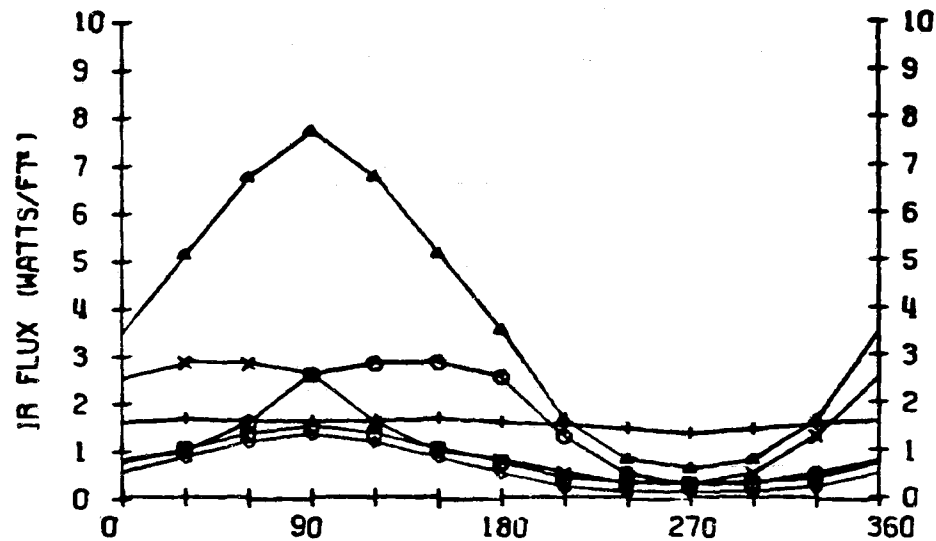
ORBIT POSITION (DEG)

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * +Z NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	4.6	4.2	3.2	5.8	5.3	6.7
R	+Y (○)	4.8	4.1	2.7	6.4	3.0	6.1
F	+Z (△)	0.1	0.1	0.1	1.3	0.7	2.6
L	-X (+)	4.8	4.4	3.9	5.8	3.2	5.2
U	-Y (X)	4.9	3.9	2.9	6.5	3.1	6.2
X	-Z (◇)	7.5	8.0	7.3	7.9	6.9	7.1

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 2

Nose down 45° to sun

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

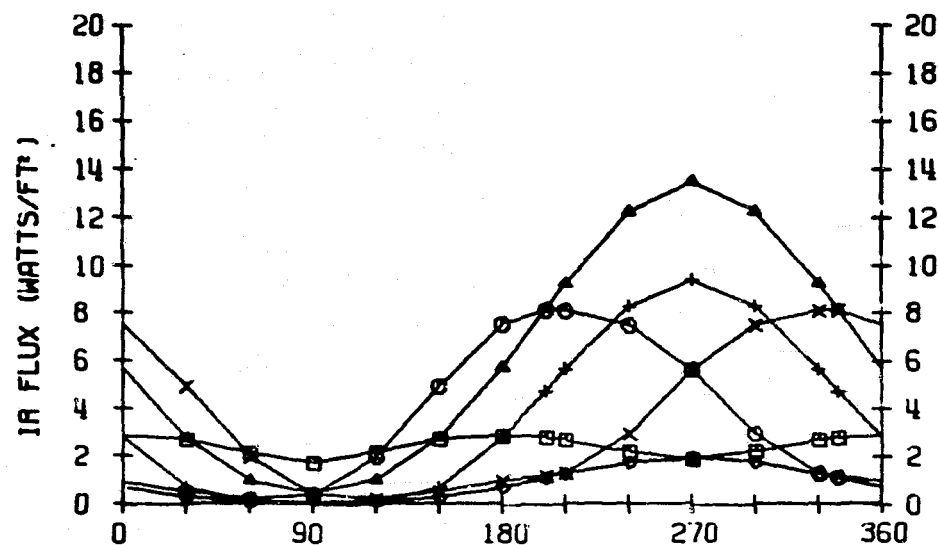
FOR

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

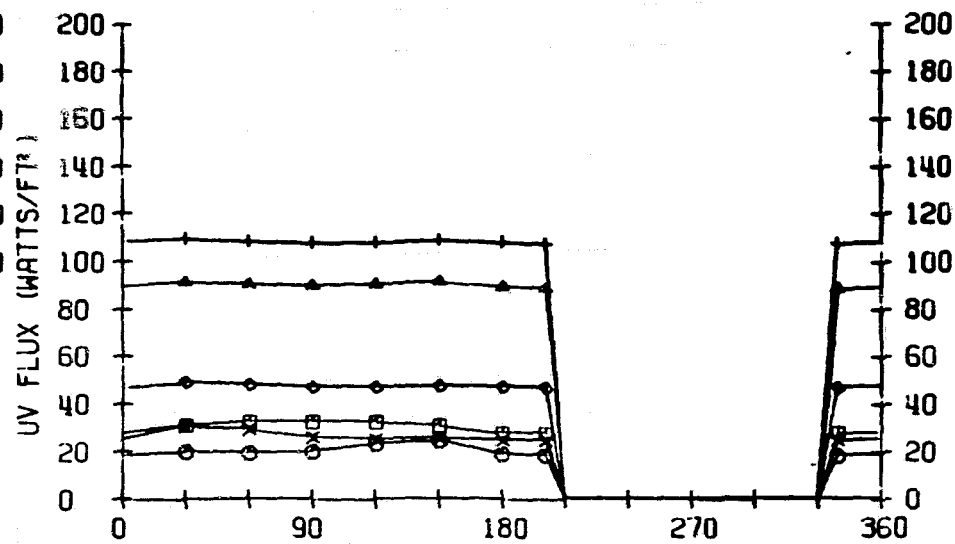
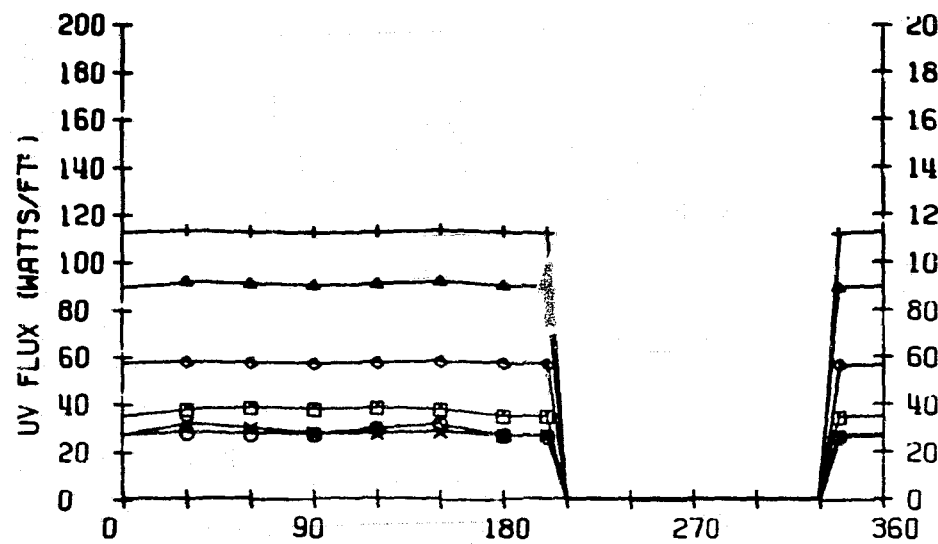
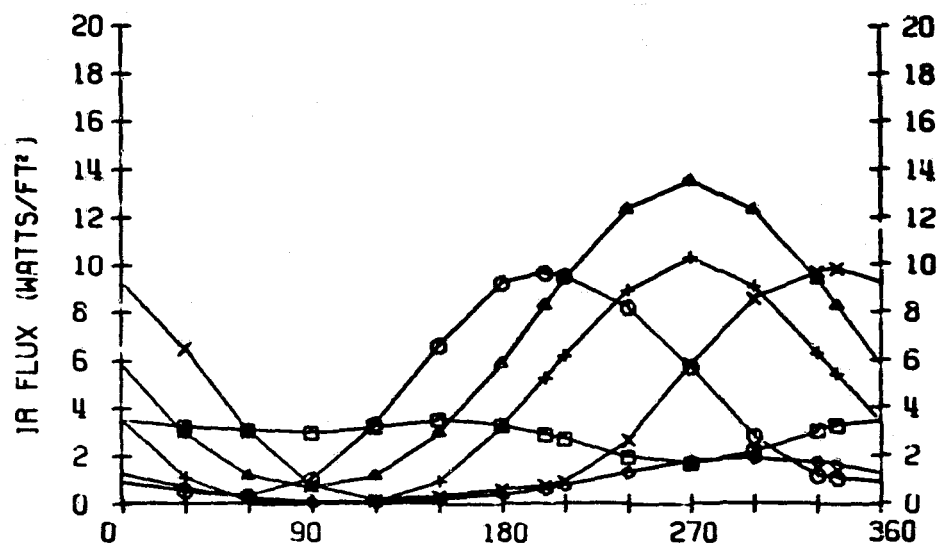
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	2.4	2.8	3.4	1.5	1.9	0.9
R	+Y (○)	3.5	4.1	5.2	2.0	4.9	1.7
F	+Z (Δ)	6.3	6.5	6.5	5.2	6.2	4.8
L	-X (+)	3.7	4.2	4.8	2.8	5.0	2.9
U	-Y (×)	3.5	4.0	5.2	2.0	4.9	1.7
X	-Z (◇)	0.8	0.9	1.0	0.9	1.0	0.8
U	+X (□)	22.7	19.0	17.8	28.7	37.6	47.6
V	+Y (○)	17.3	12.7	11.6	26.9	17.8	36.5
F	+Z (Δ)	55.7	55.6	55.5	58.7	59.7	70.0
L	-X (+)	69.5	66.9	66.3	76.1	68.2	83.4
U	-Y (×)	17.4	16.5	12.0	26.9	17.8	36.5
X	-Z (◇)	35.1	29.3	30.1	41.9	40.6	50.4

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1



LOCATION 2

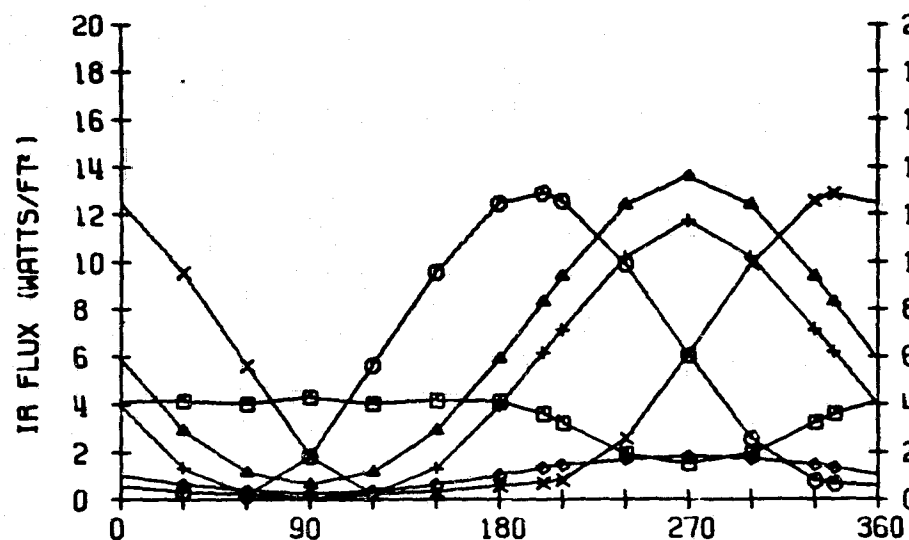


ORBIT POSITION (DEG)

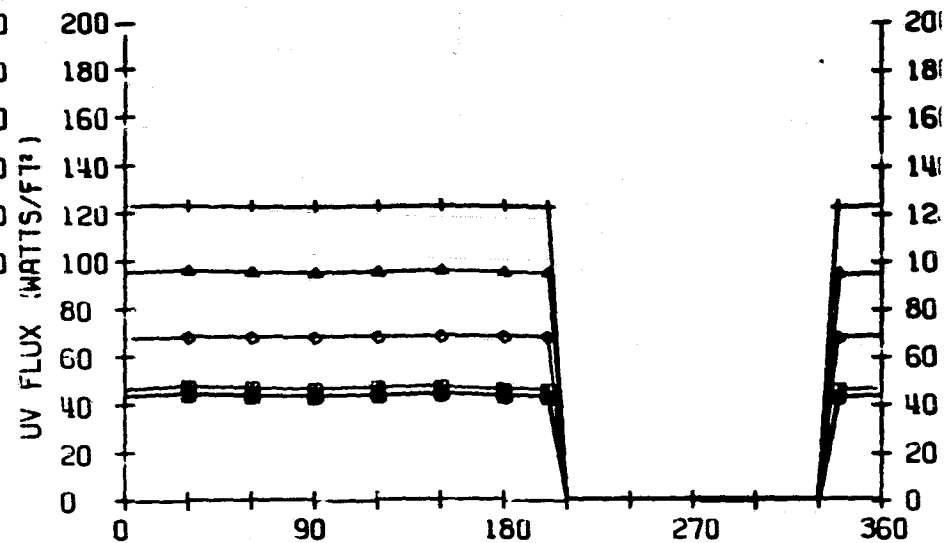
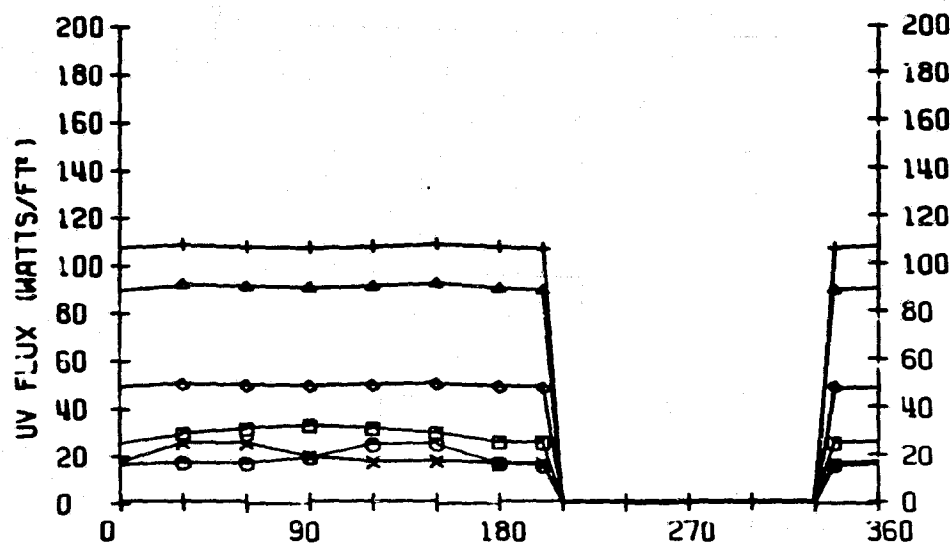
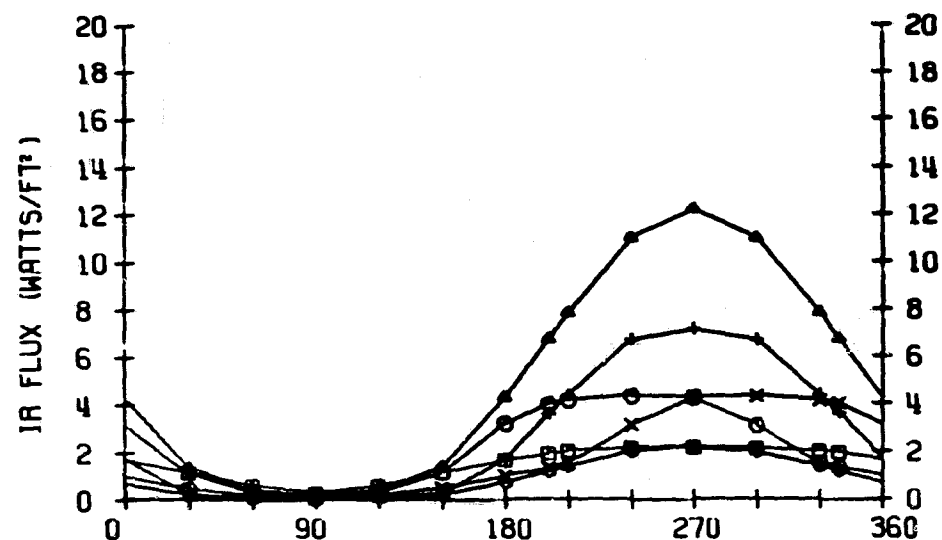
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3



LOCATION 4

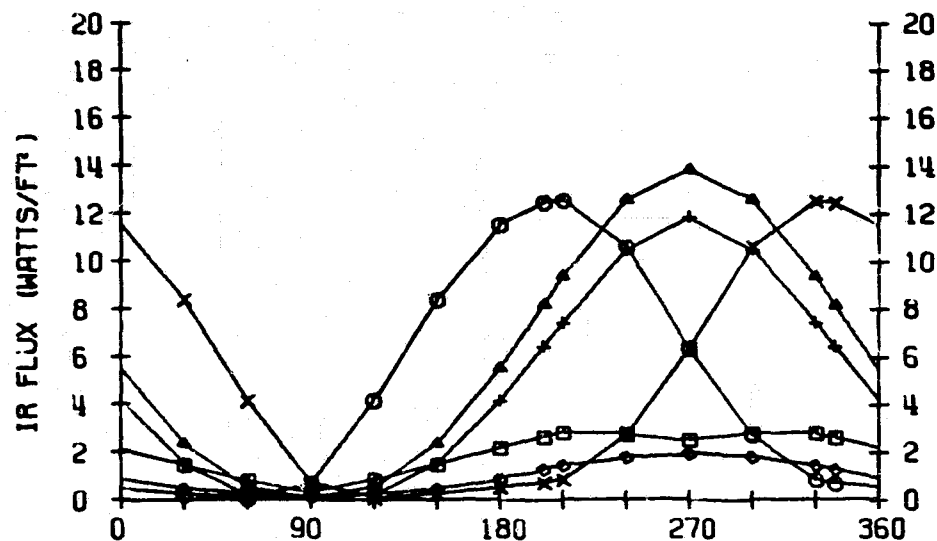


ORBIT POSITION (DEG)

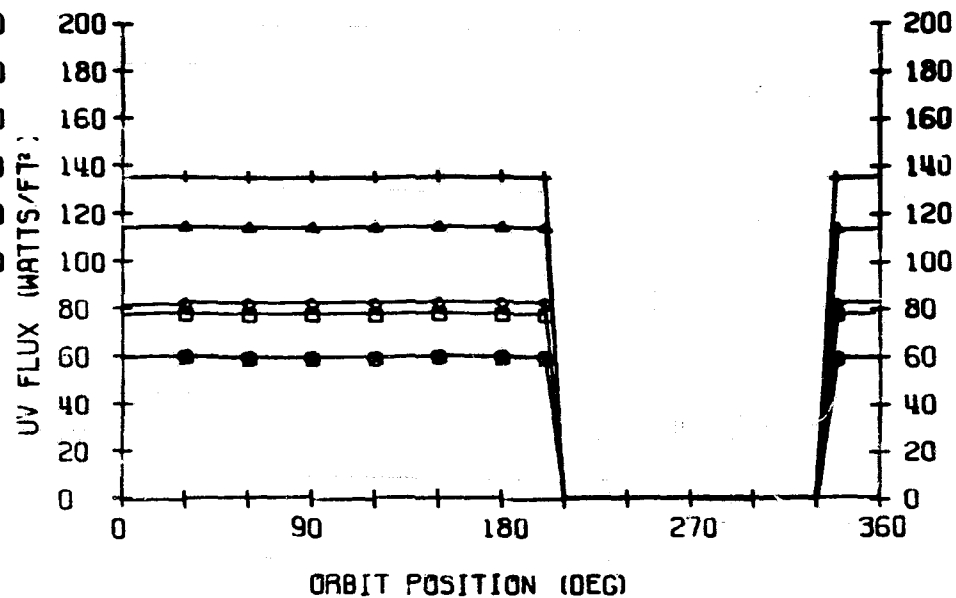
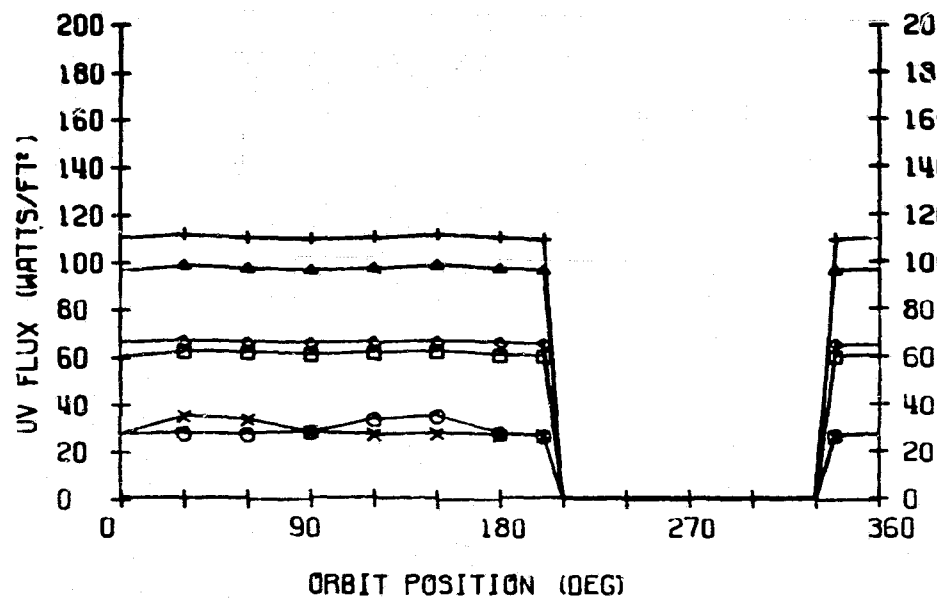
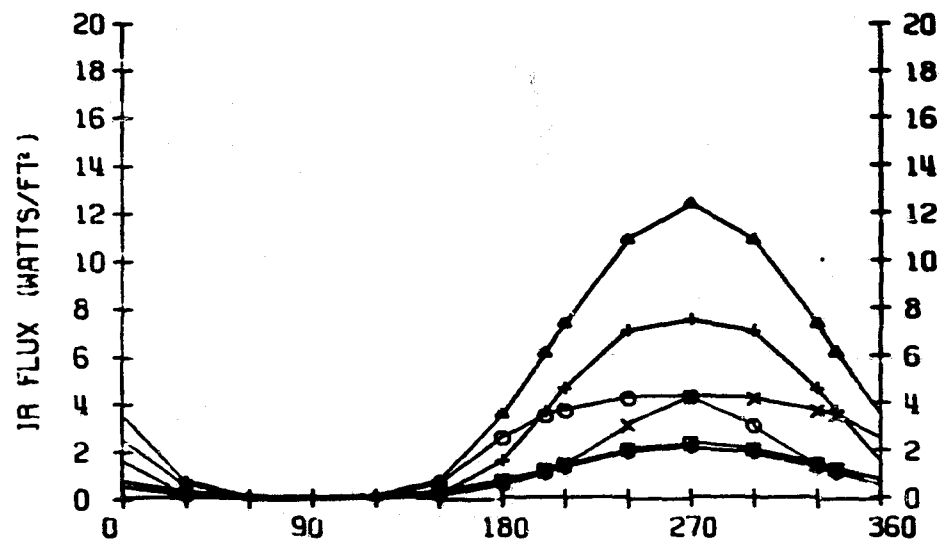
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	22.0	19.0	16.2	27.2	37.1	47.4
R	+Y (○)	18.9	14.8	10.3	26.9	18.6	41.1
F	+Z (△)	0.5	0.3	0.2	5.0	4.6	16.6
L	-X (+)	17.6	15.2	13.0	22.6	14.7	32.0
U	-Y (X)	18.8	16.1	10.7	26.8	18.7	41.2
X	-Z (◇)	32.9	32.1	30.7	36.2	44.3	52.5

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

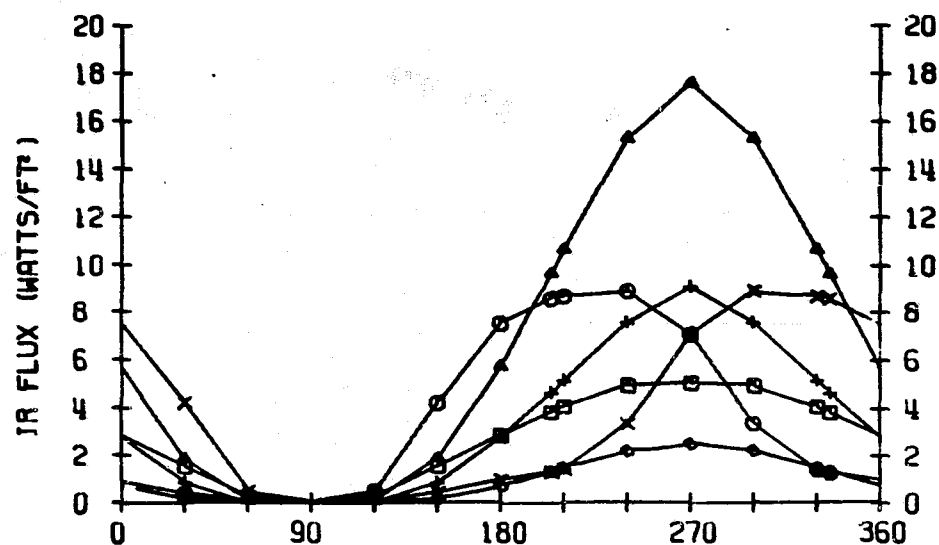
FOR

450 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

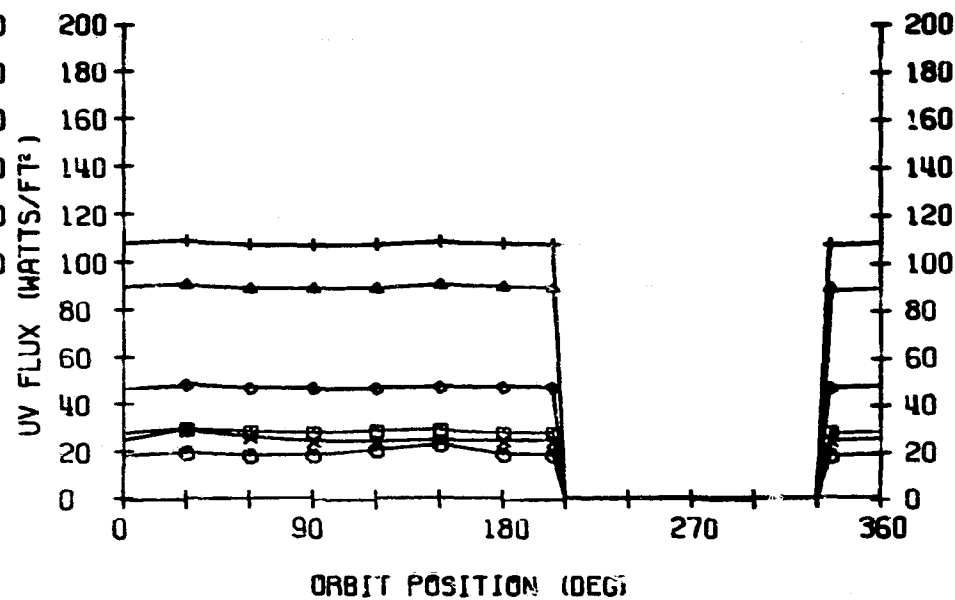
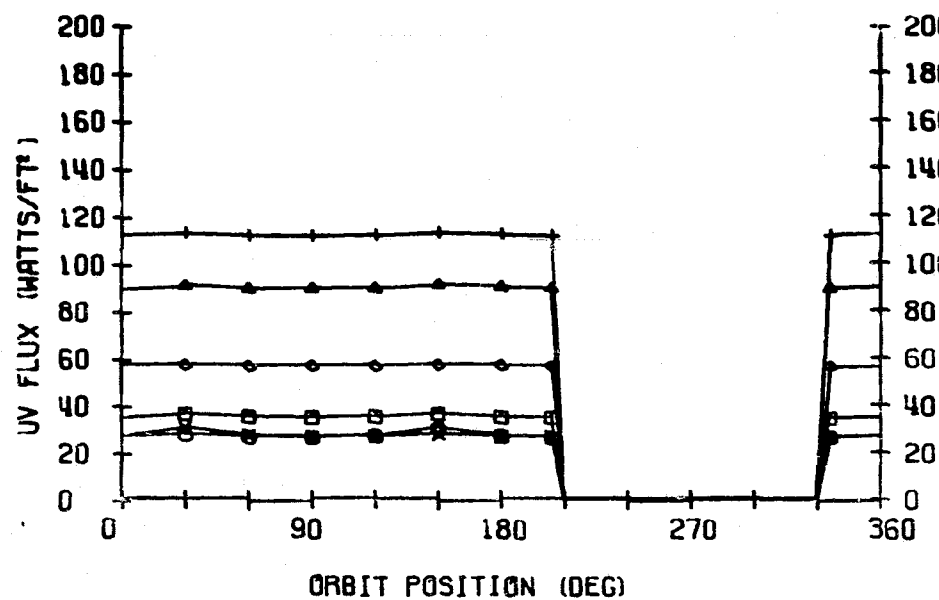
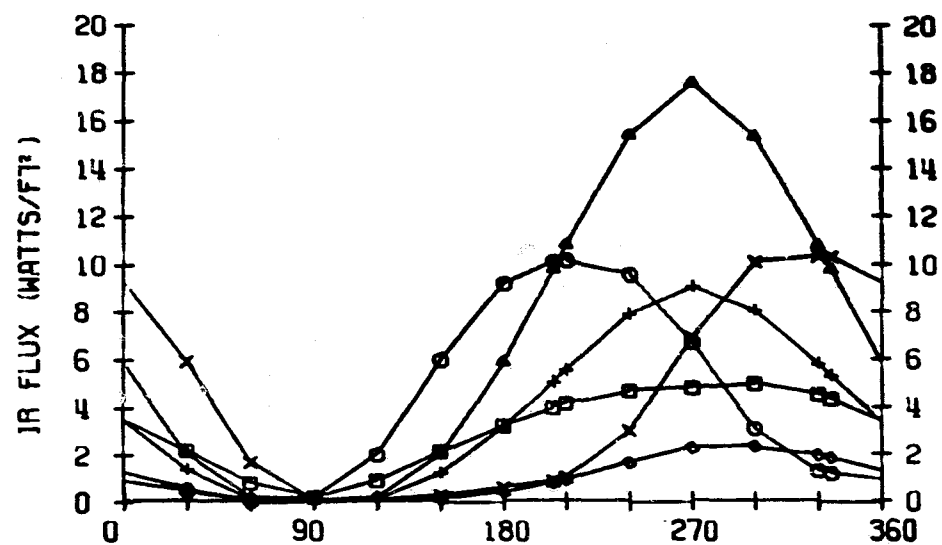
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	2.7	3.0	3.5	2.1	2.1	1.0
R	+Y (○)	3.6	4.1	5.2	2.2	4.9	1.8
F	+Z (Δ)	7.1	7.2	7.2	6.0	6.9	5.0
L	-X (+)	3.5	3.8	4.3	2.7	4.4	2.7
U	-Y (X)	3.6	4.1	5.2	2.2	4.9	1.8
X	-Z (◇)	1.0	0.9	1.1	1.1	1.0	0.9
U	+X (□)	22.3	18.2	16.7	29.2	38.6	49.0
V	+Y (○)	17.3	12.5	11.2	27.4	18.1	37.5
F	+Z (Δ)	56.8	56.7	56.6	60.1	61.3	72.0
L	-X (+)	71.3	68.7	68.2	78.2	70.3	85.8
U	-Y (X)	17.4	16.4	11.6	27.4	18.1	37.5
X	-Z (◇)	36.0	29.9	30.8	43.0	41.7	51.9

450 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1

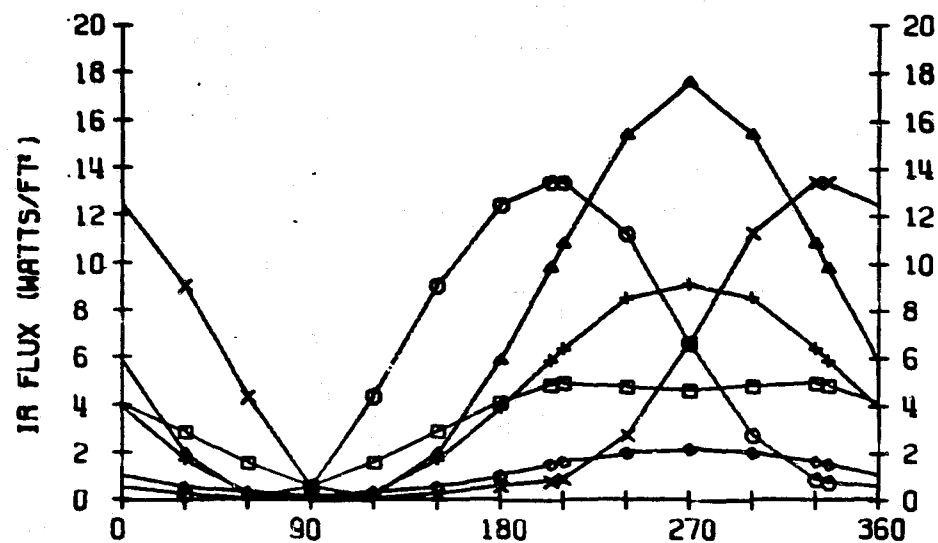


LOCATION 2

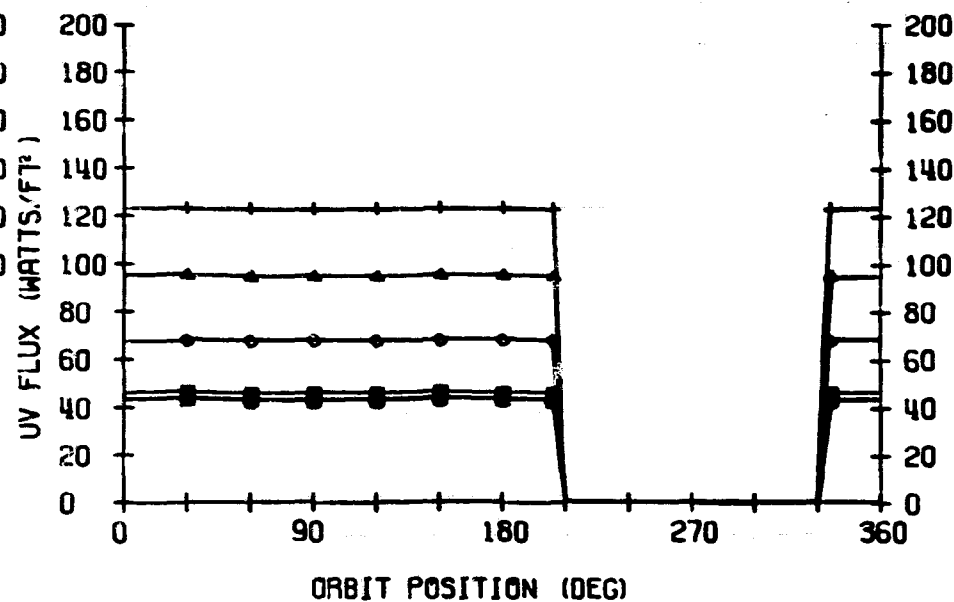
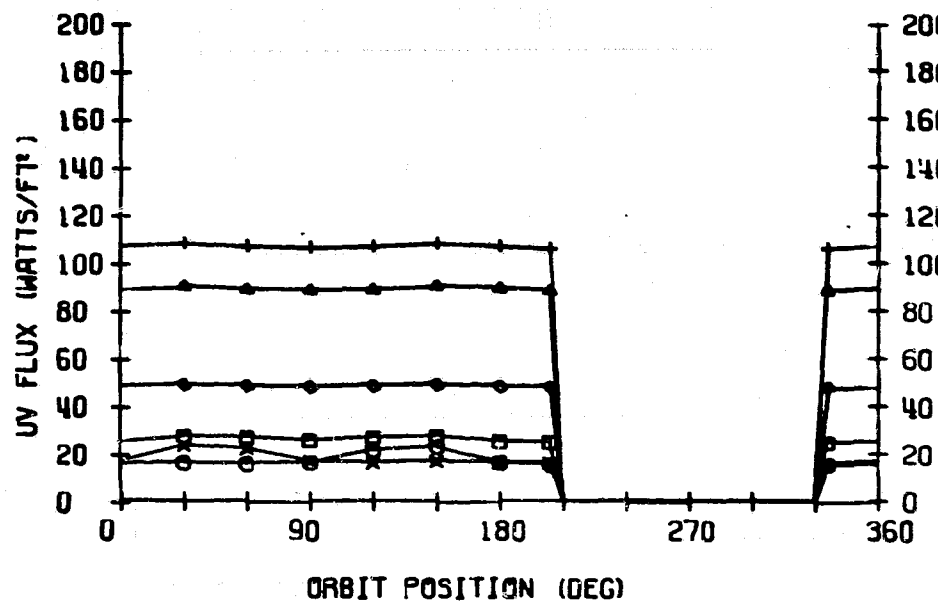
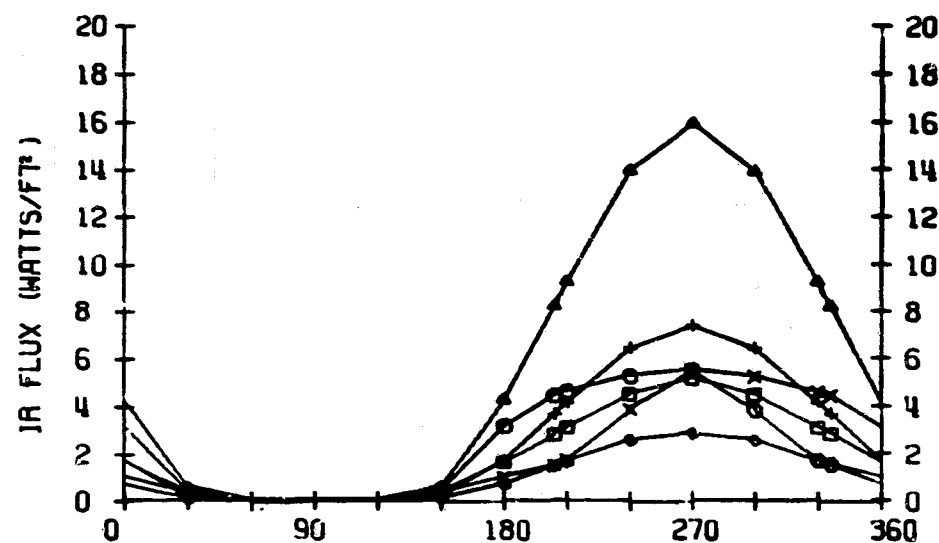


450 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3



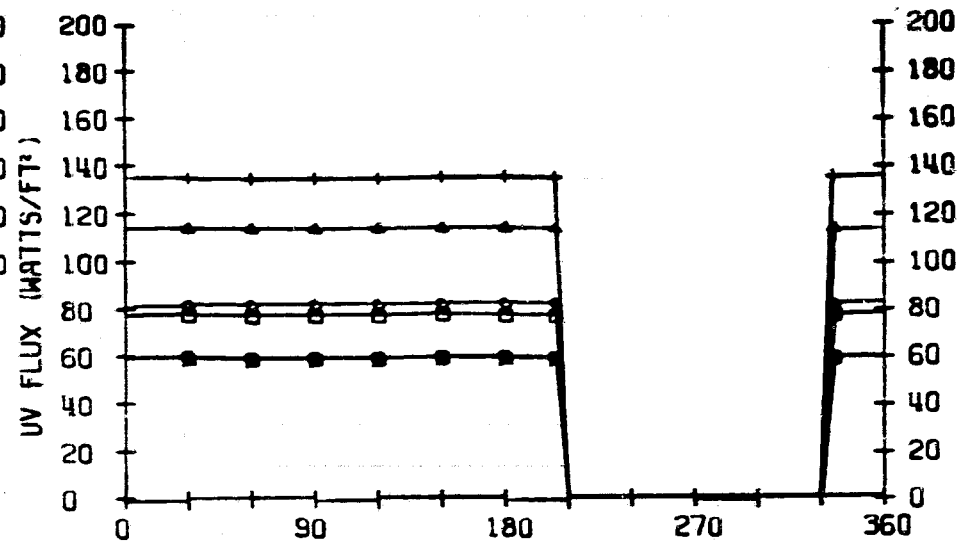
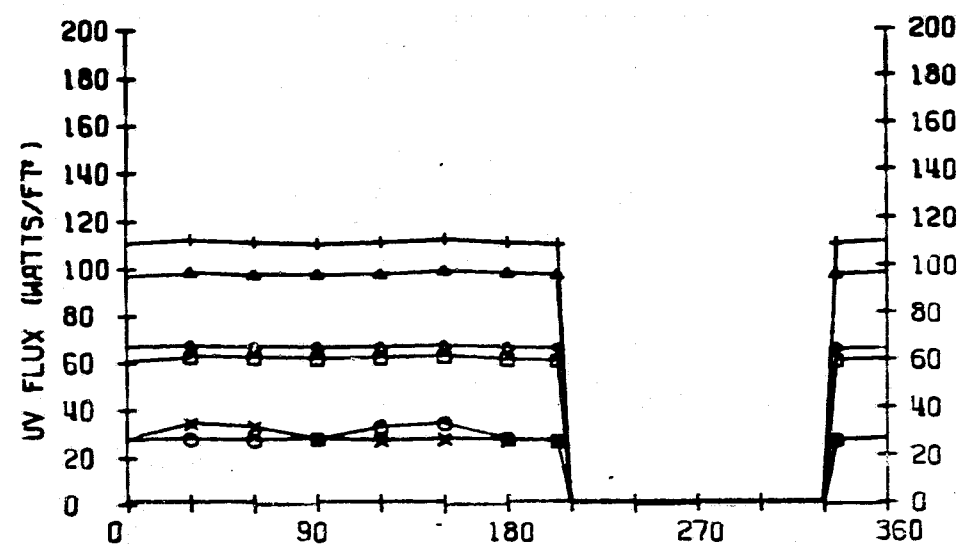
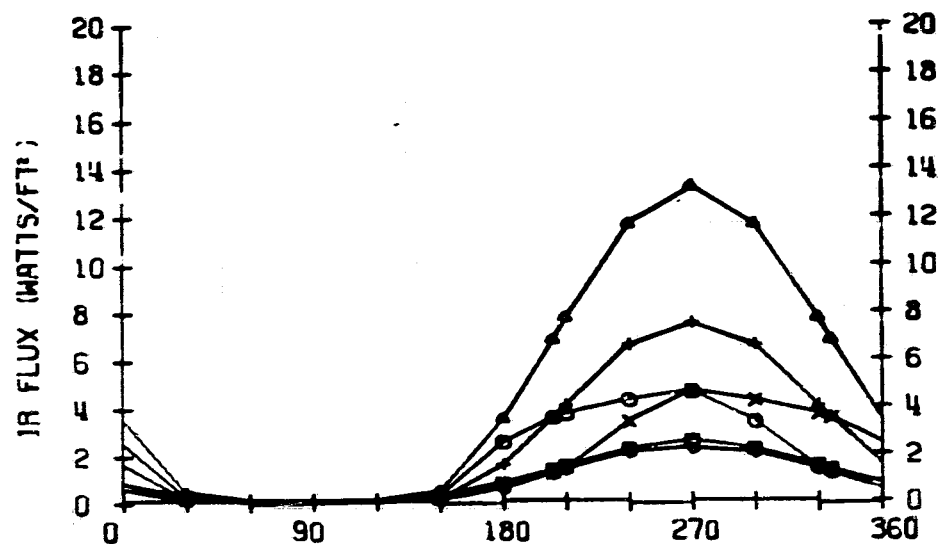
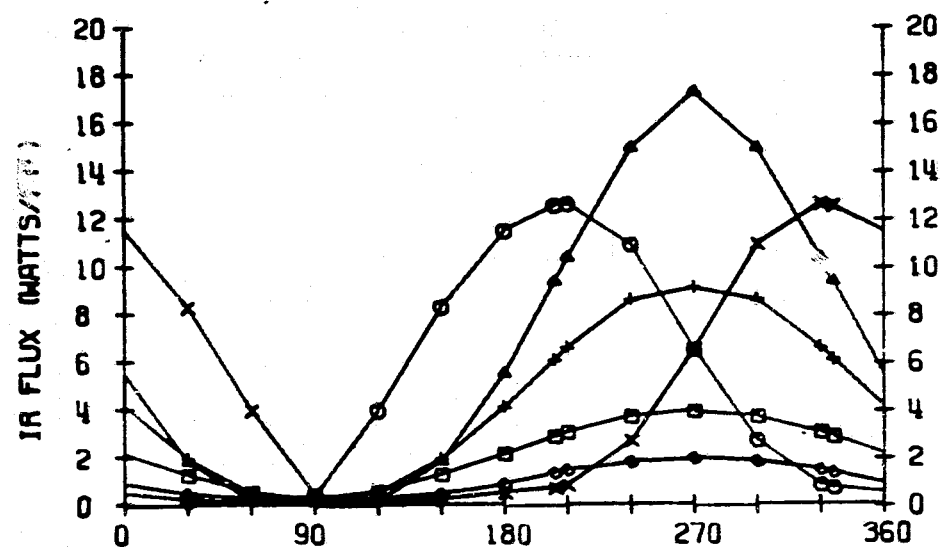
LOCATION 4



450 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5

LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=30 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	22.5	19.4	16.5	27.9	37.4	48.0
R	+Y (○)	19.4	15.1	10.5	27.6	18.9	41.7
F	+Z (△)	0.5	0.3	0.2	5.1	4.6	16.8
L	-X (+)	18.0	15.6	13.3	23.2	15.0	32.6
U	-Y (X)	19.3	16.6	10.9	27.5	19.0	41.8
X	-Z (◇)	33.9	32.9	31.5	37.3	45.0	53.3

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ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

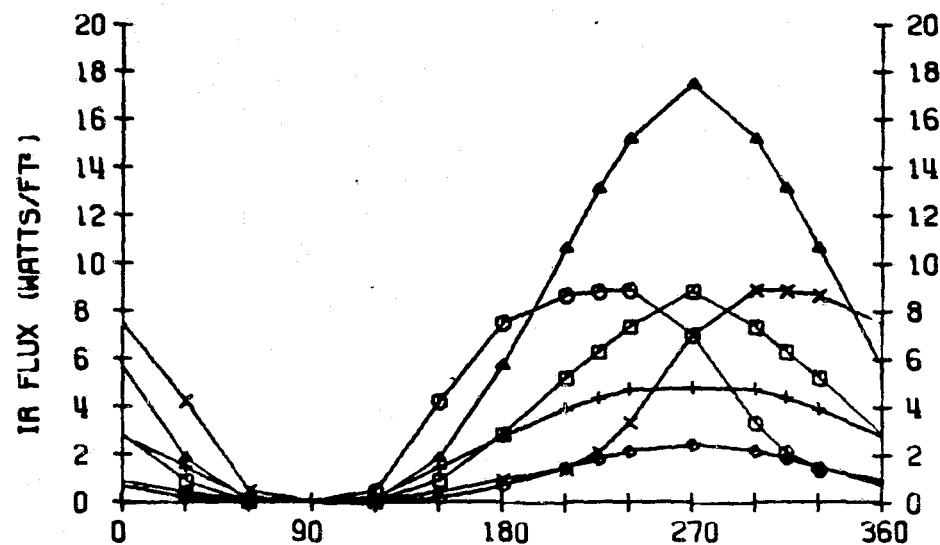
FOR

450 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

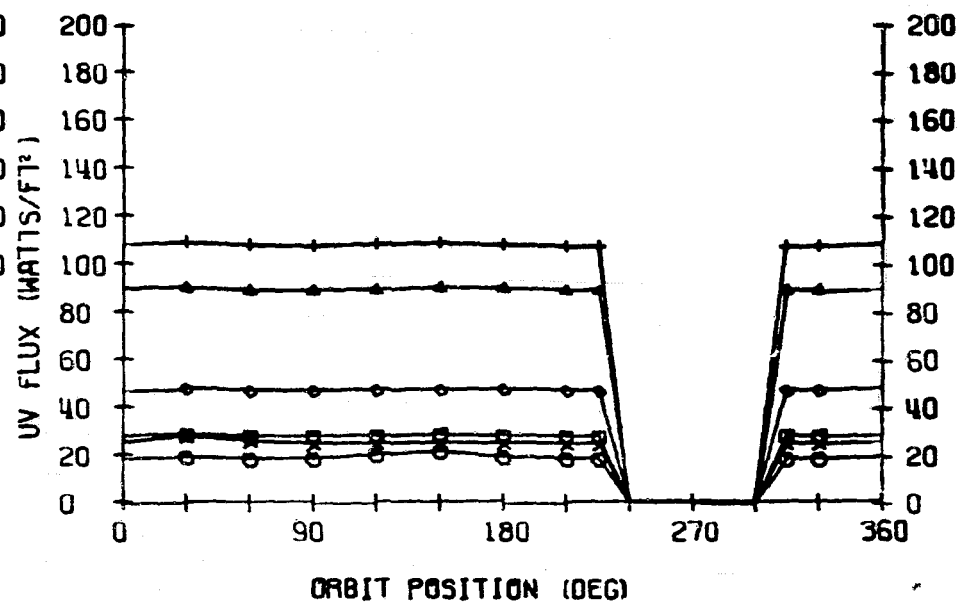
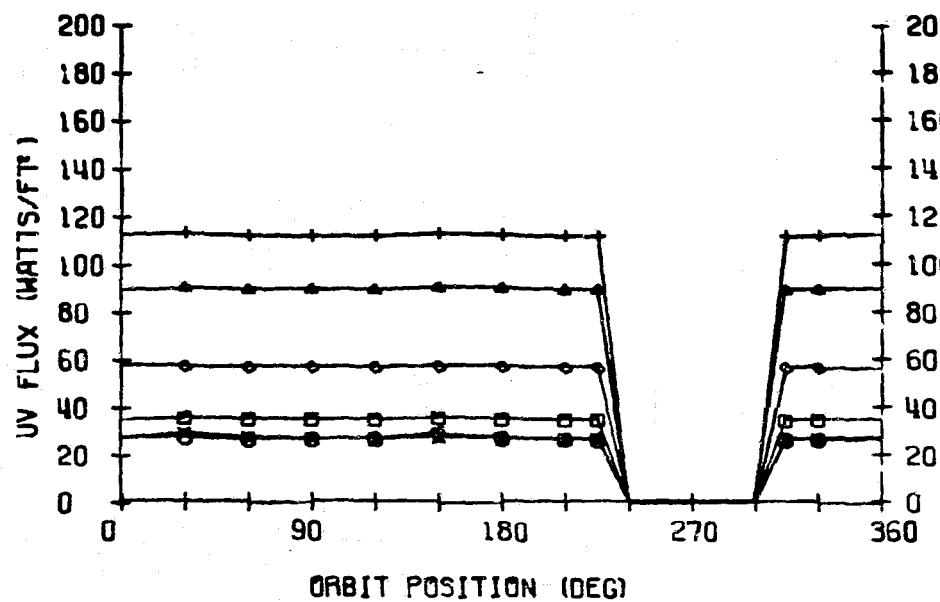
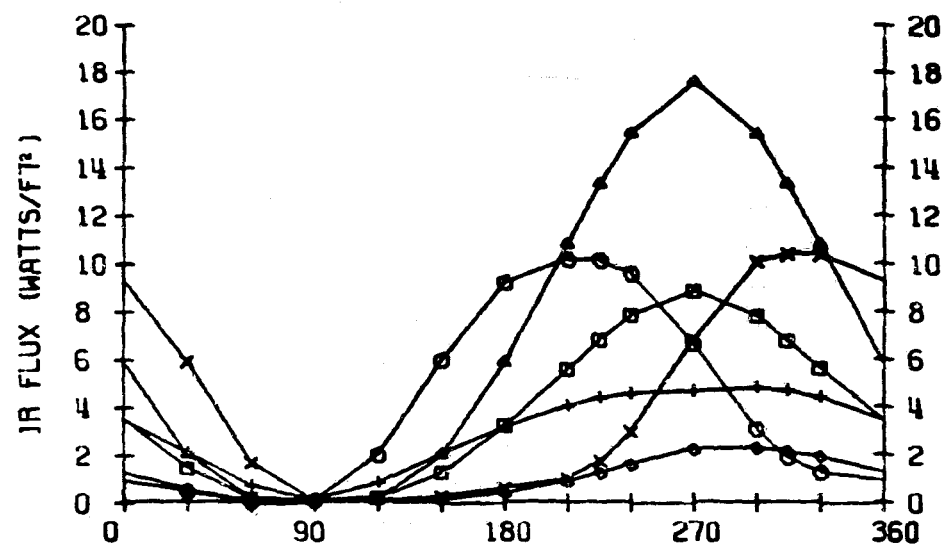
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.5	3.8	4.3	2.5	2.1	0.9
R	+Y (○)	3.6	4.1	5.2	2.1	4.7	1.6
F	+Z (Δ)	7.0	7.2	7.2	5.9	6.5	4.5
L	-X (+)	2.6	3.0	3.4	2.0	3.6	1.9
U	-Y (X)	3.6	4.1	5.2	2.1	4.7	1.6
X	-Z (◇)	0.9	0.9	1.1	1.1	0.9	0.8
U	+X (□)	26.2	21.1	19.1	34.6	45.8	58.2
V	+Y (○)	20.3	14.4	12.6	32.5	20.9	44.6
F	+Z (Δ)	67.4	67.2	67.1	71.4	72.7	85.6
L	-X (+)	84.8	81.7	81.2	92.9	83.7	102.0
U	-Y (X)	20.4	19.1	13.1	32.5	20.9	44.6
X	-Z (◇)	42.7	35.5	36.5	51.1	49.5	61.7

450 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1

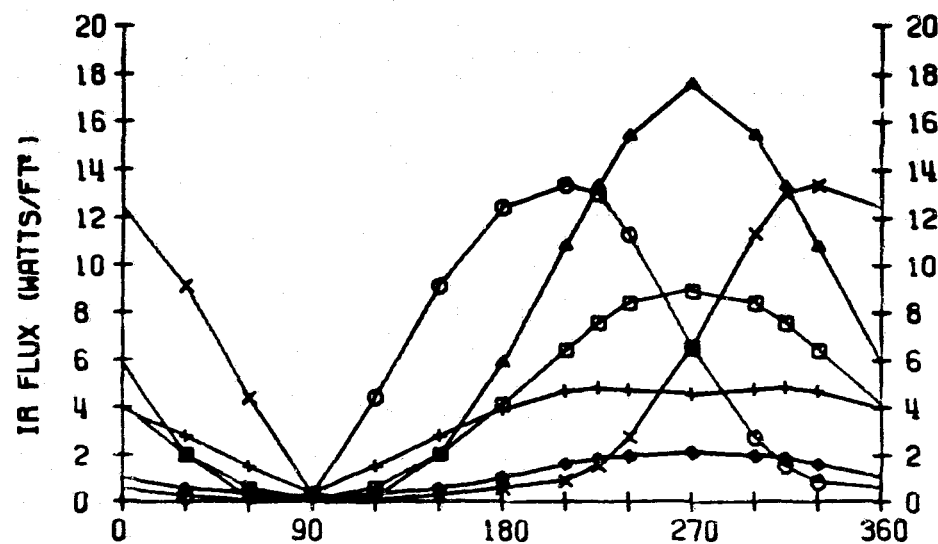


LOCATION 2

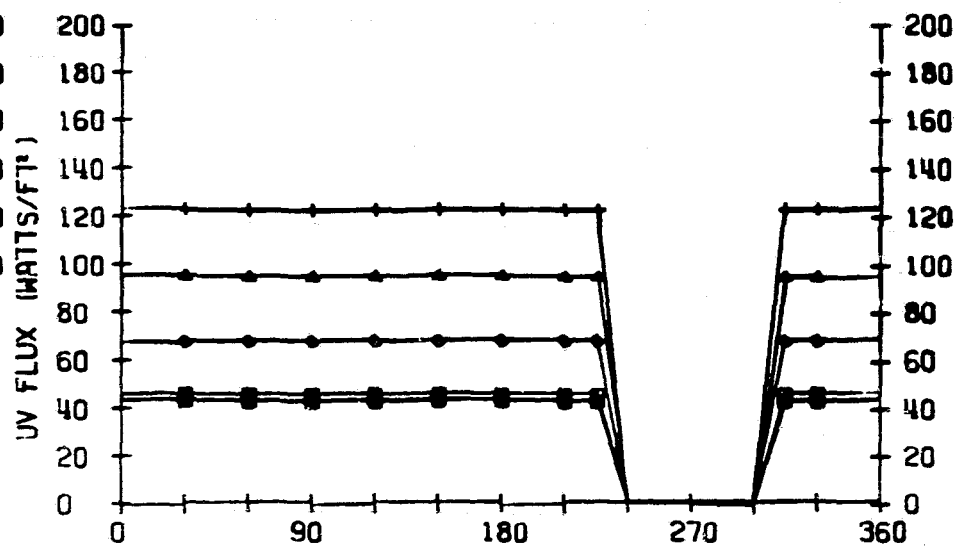
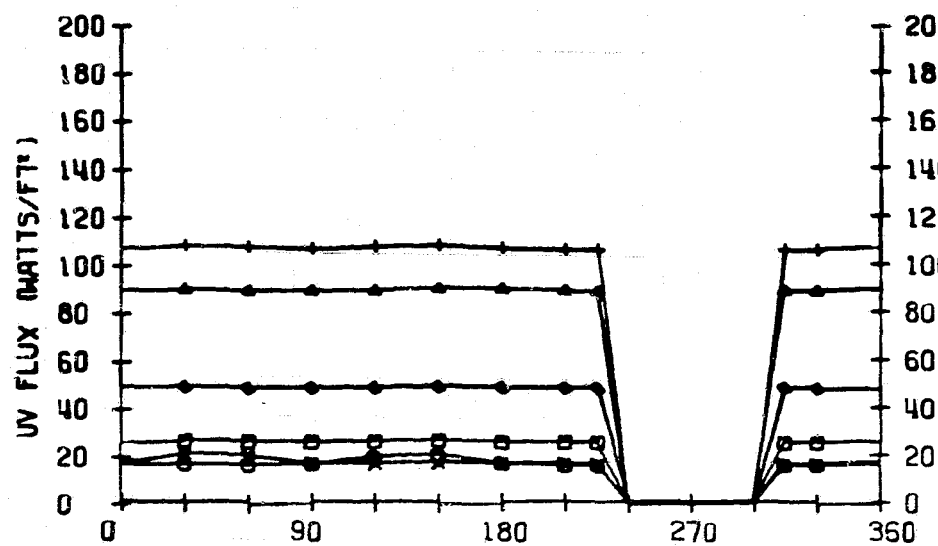
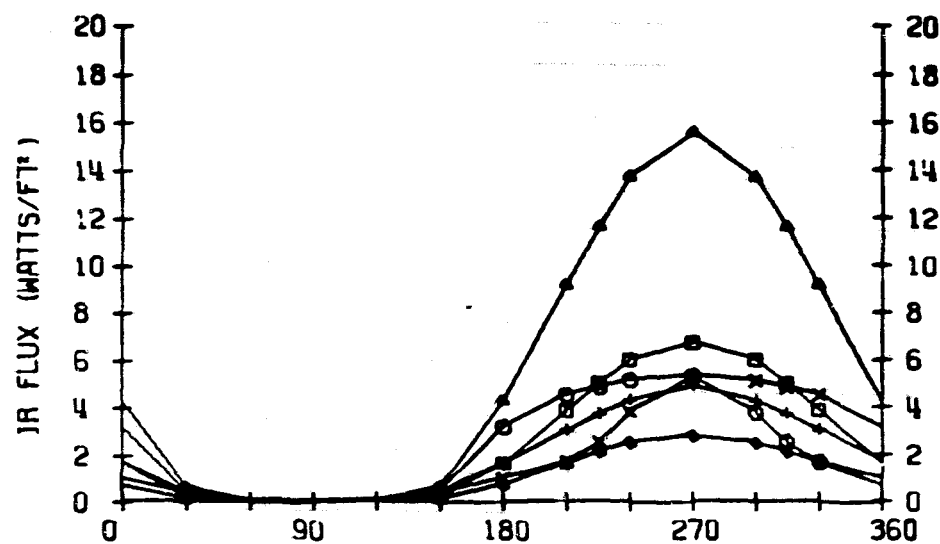


450 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3



LOCATION 4

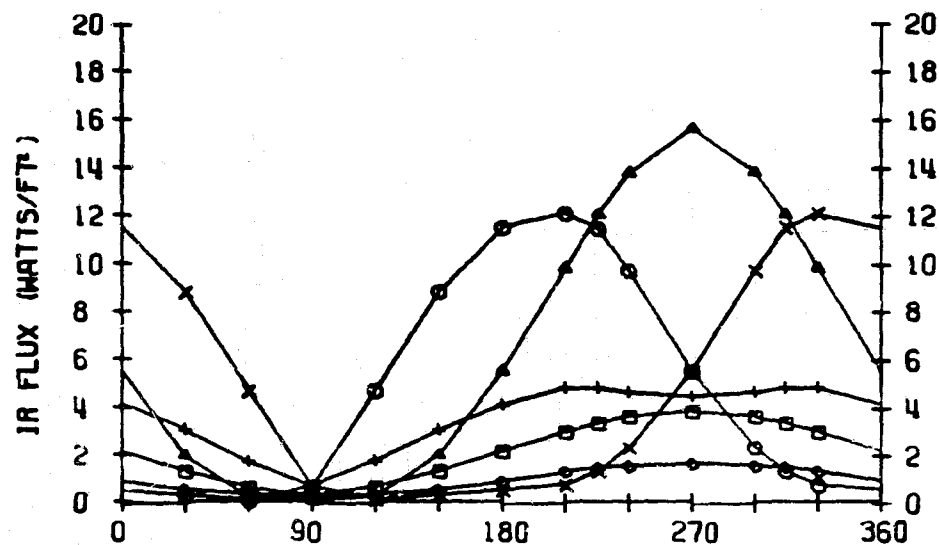


ORBIT POSITION (DEG)

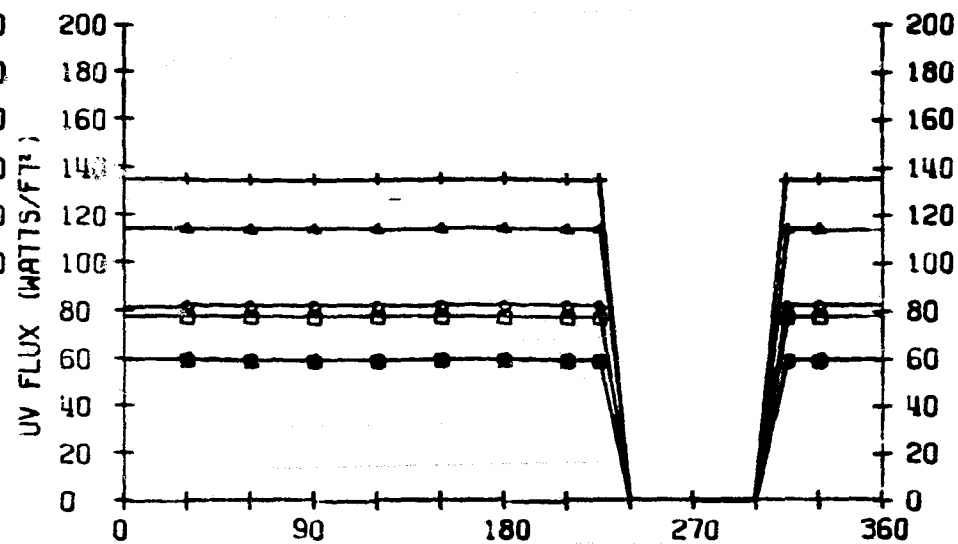
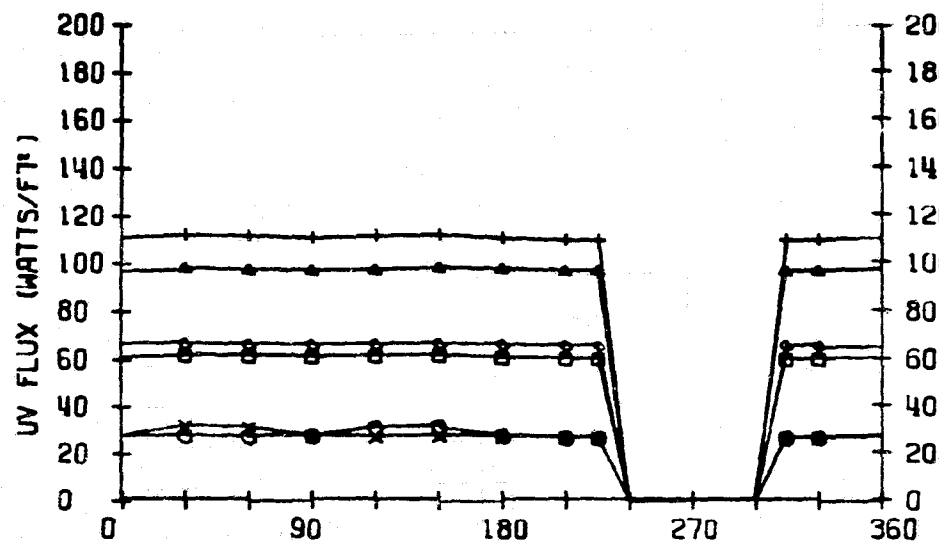
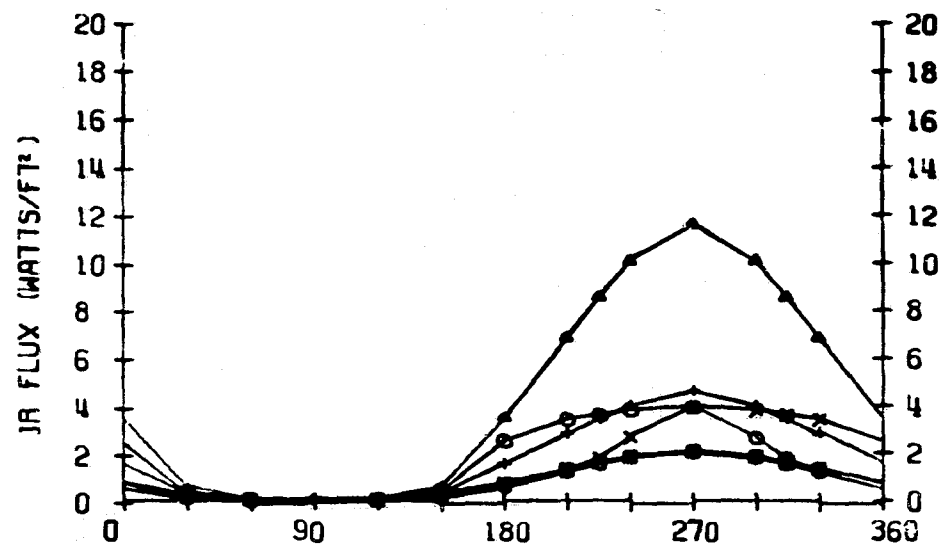
ORBIT POSITION (DEG)

450 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=60 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	26.7	22.9	19.6	33.1	44.4	57.0
R	+Y (○)	23.0	17.8	12.4	32.8	22.4	49.6
F	+Z (△)	0.6	0.4	0.2	6.1	5.5	19.9
L	-X (+)	21.4	18.4	15.7	27.6	17.7	38.8
U	-Y (X)	22.8	19.6	12.9	32.6	22.5	49.7
X	-Z (◇)	40.3	38.9	37.4	44.5	53.5	63.6

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

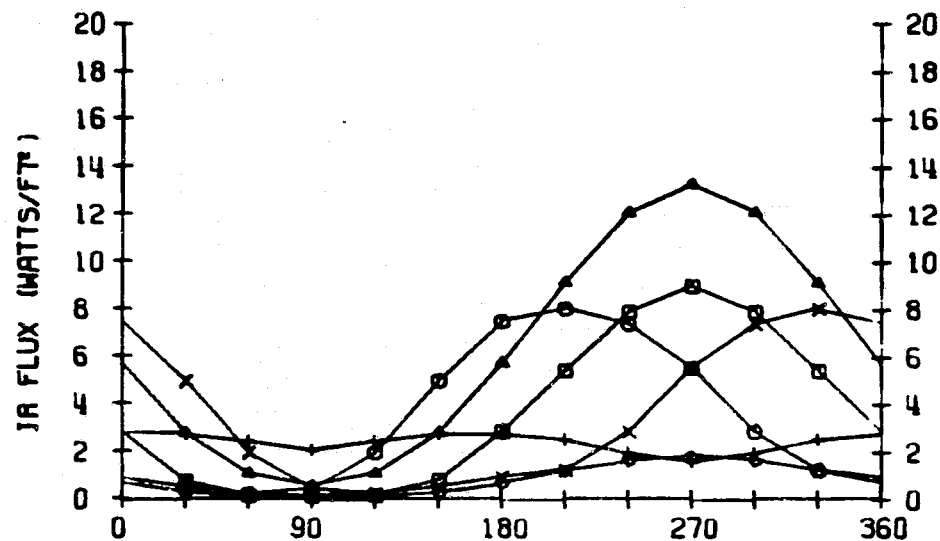
450 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

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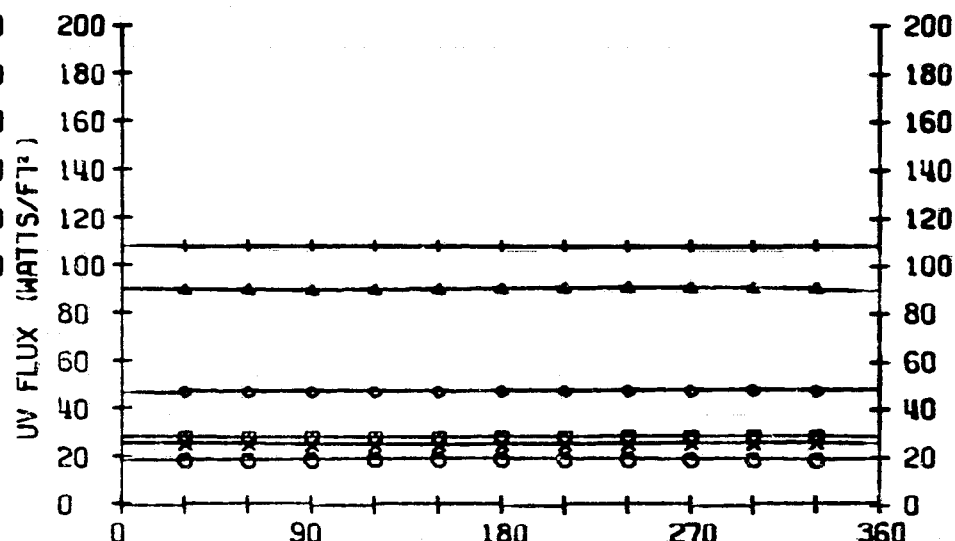
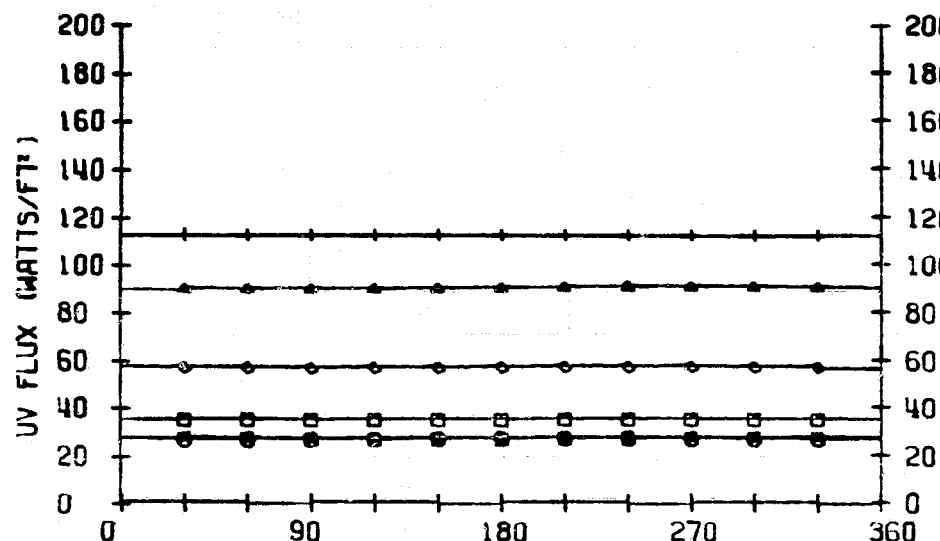
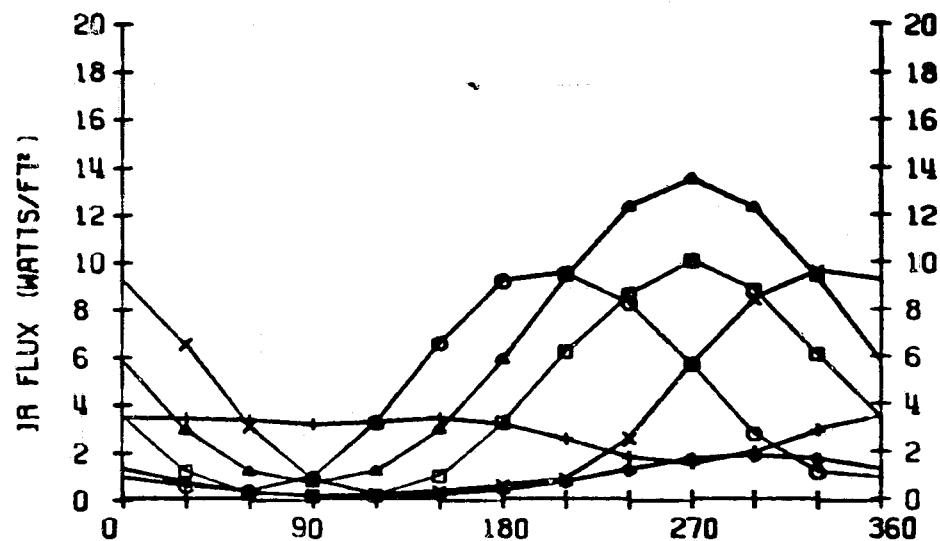
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.6	4.1	4.7	2.5	2.1	0.8
R	+Y (○)	3.5	4.1	5.2	1.9	4.7	1.4
F	+Z (Δ)	6.3	6.5	6.4	5.1	5.7	3.7
L	-X (+)	2.4	2.8	3.5	1.6	3.6	1.6
U	-Y (x)	3.5	4.0	5.2	1.9	4.7	1.4
X	-Z (◇)	0.8	0.8	1.0	0.9	0.8	0.6
U	+X (□)	34.9	28.0	25.2	46.1	60.4	77.5
V	+Y (○)	26.8	18.8	16.1	43.3	27.0	59.4
F	+Z (Δ)	89.9	89.6	89.4	95.3	96.8	114.0
L	-X (+)	112.8	108.5	107.6	123.7	110.8	135.8
U	-Y (x)	27.0	25.2	16.7	43.3	27.0	59.4
X	-Z (◇)	57.0	47.2	48.5	68.1	65.8	82.2

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1



LOCATION 2



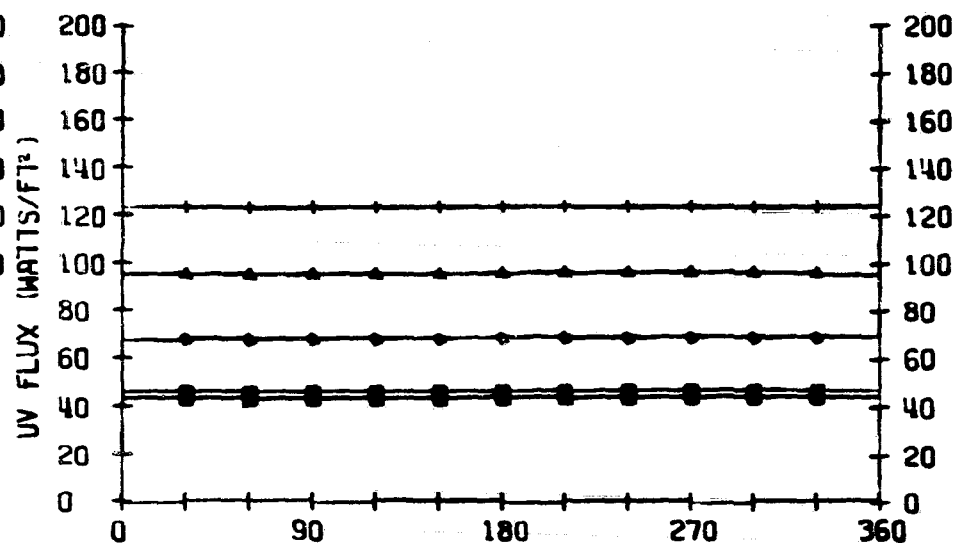
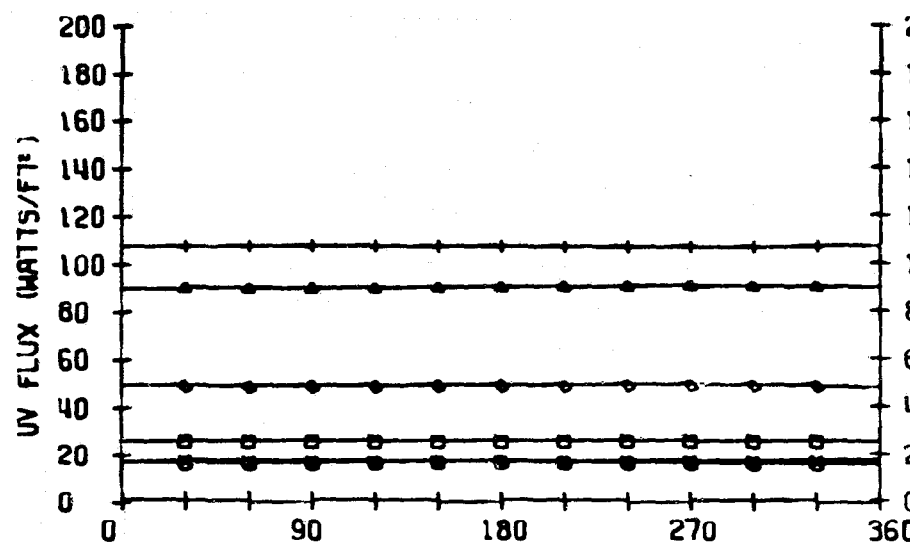
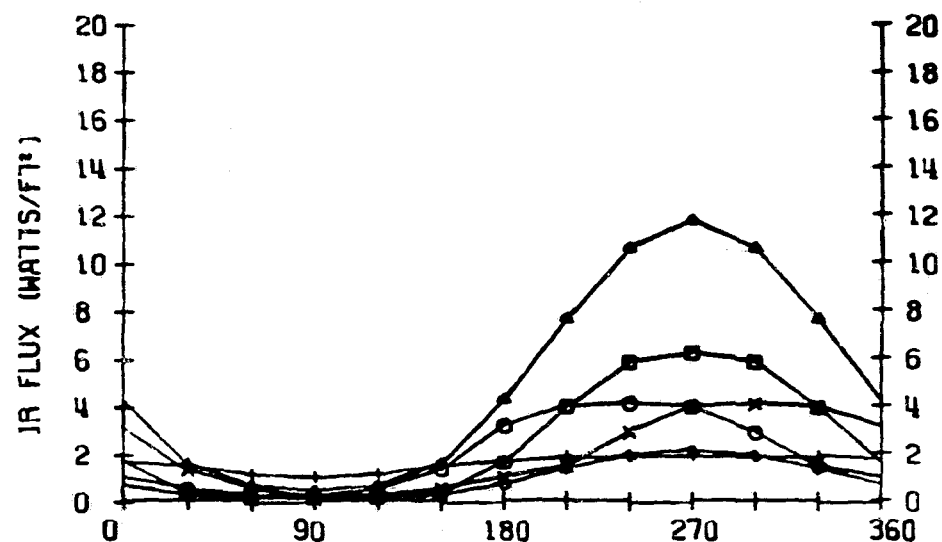
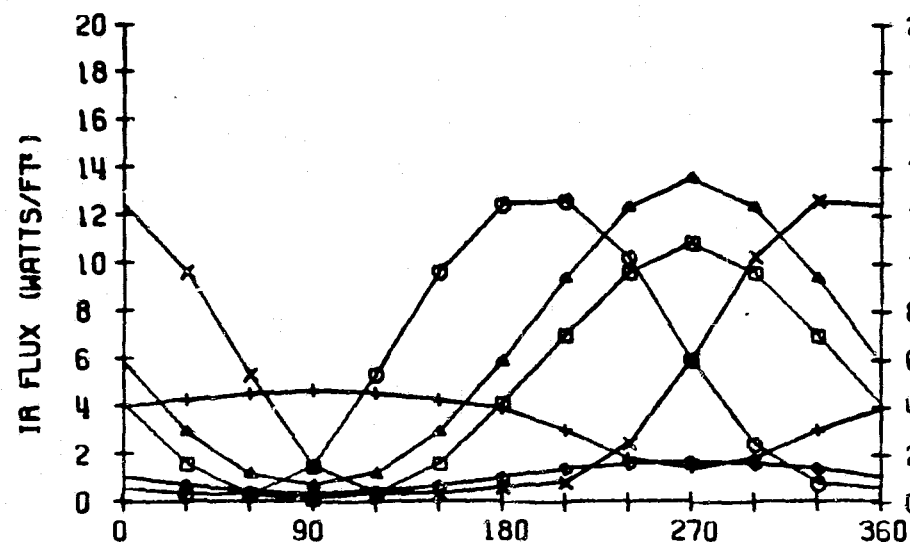
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3

LOCATION 4

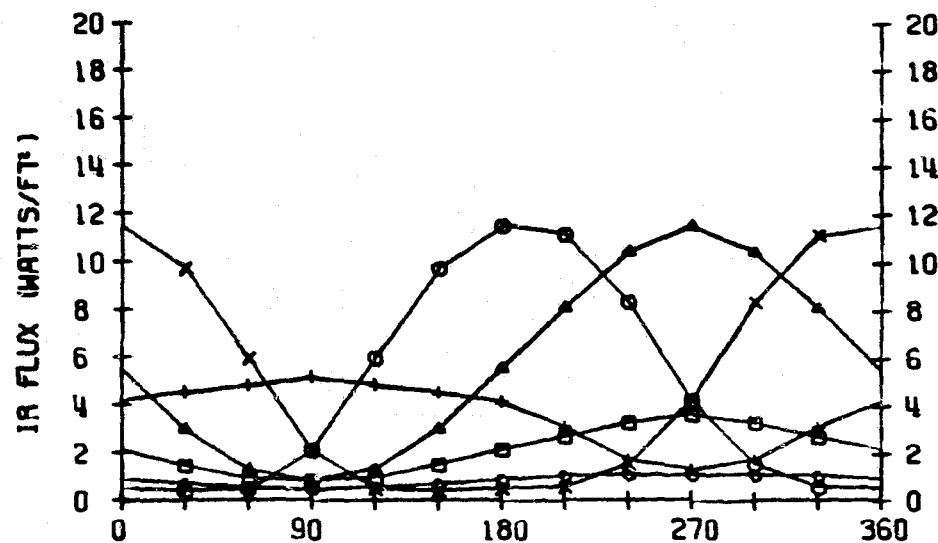


ORBIT POSITION (DEG)

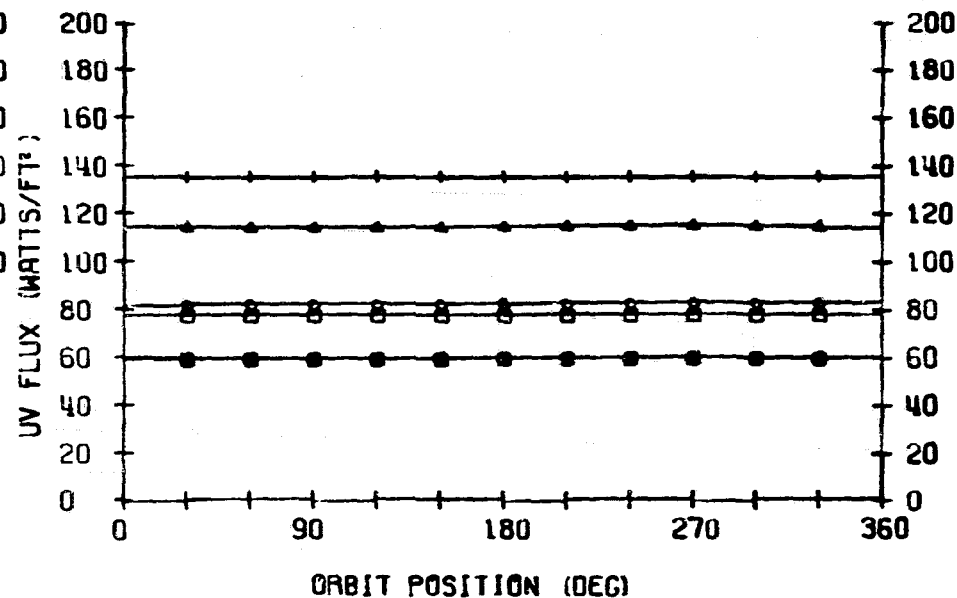
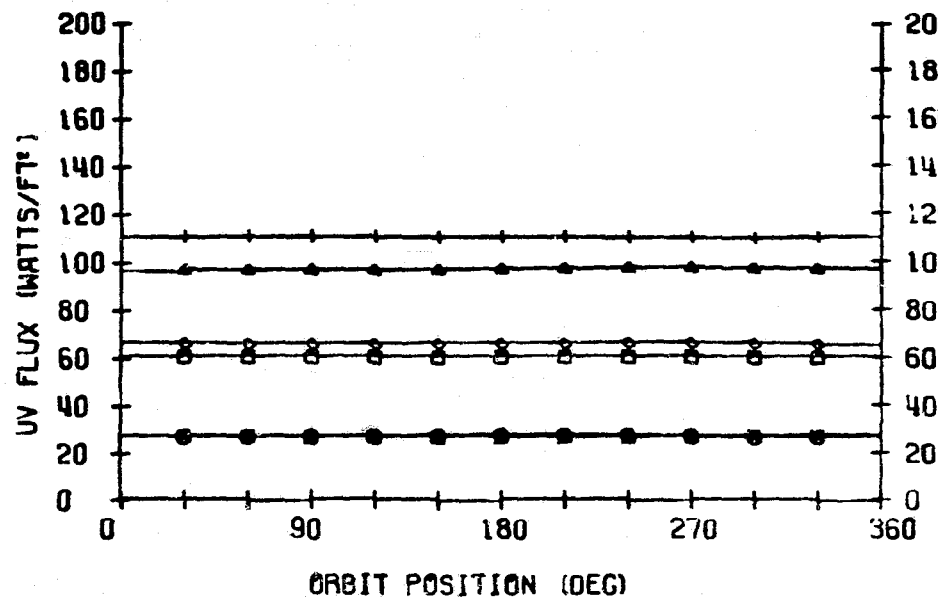
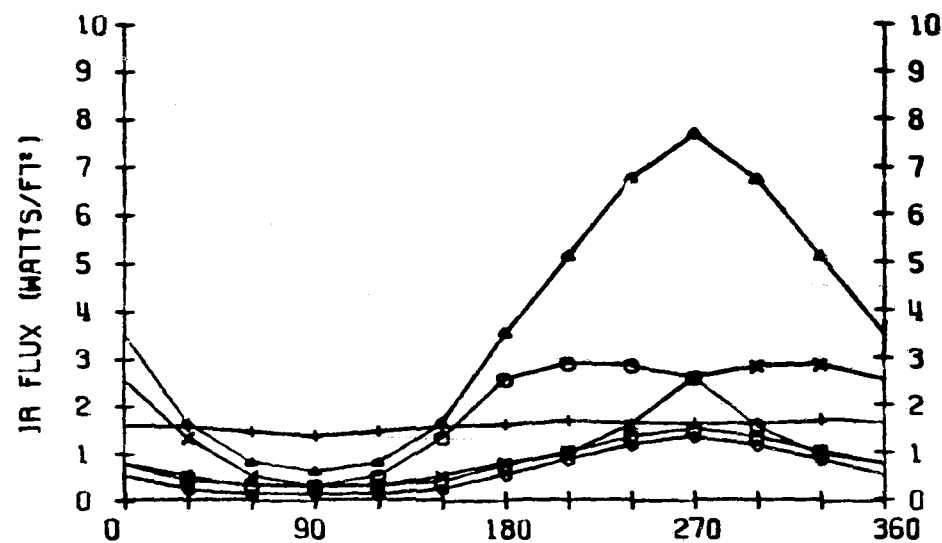
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

	SURFACE DIRECTION	LDC. 1	LDC. 2	LDC. 3	LDC. 4	LDC. 5	LDC. 6
I	+X (□)	32.6	23.0	24.0	40.4	55.1	70.6
R	+Y (○)	27.9	21.6	15.1	40.0	27.7	61.3
F	+Z (△)	0.9	0.5	0.3	7.4	6.8	24.7
L	-X (+)	26.0	22.3	19.0	33.5	21.7	47.8
U	-Y (X)	27.7	23.9	15.6	39.7	27.7	61.4
X	-Z (◇)	49.1	47.4	45.6	54.2	66.0	78.6

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

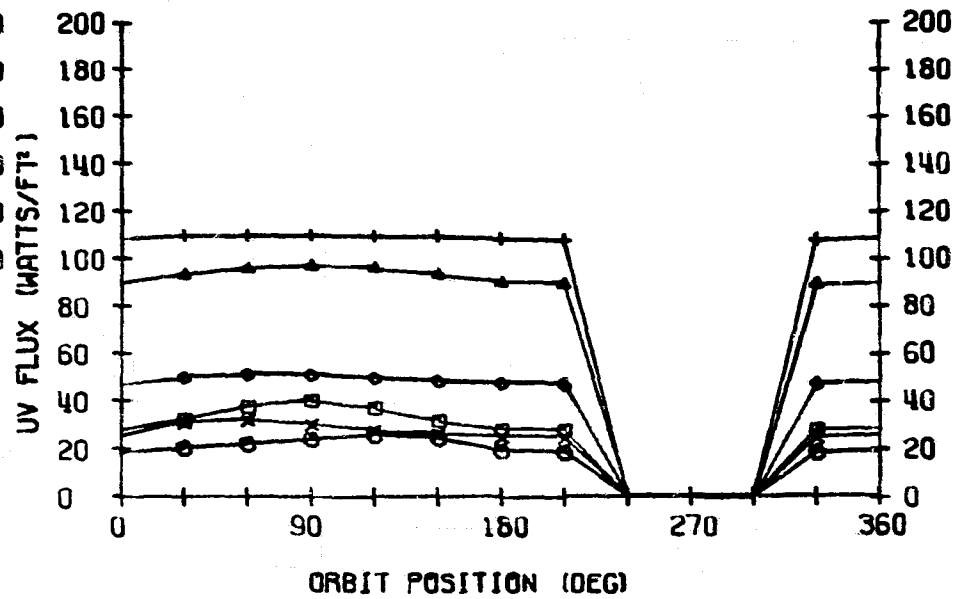
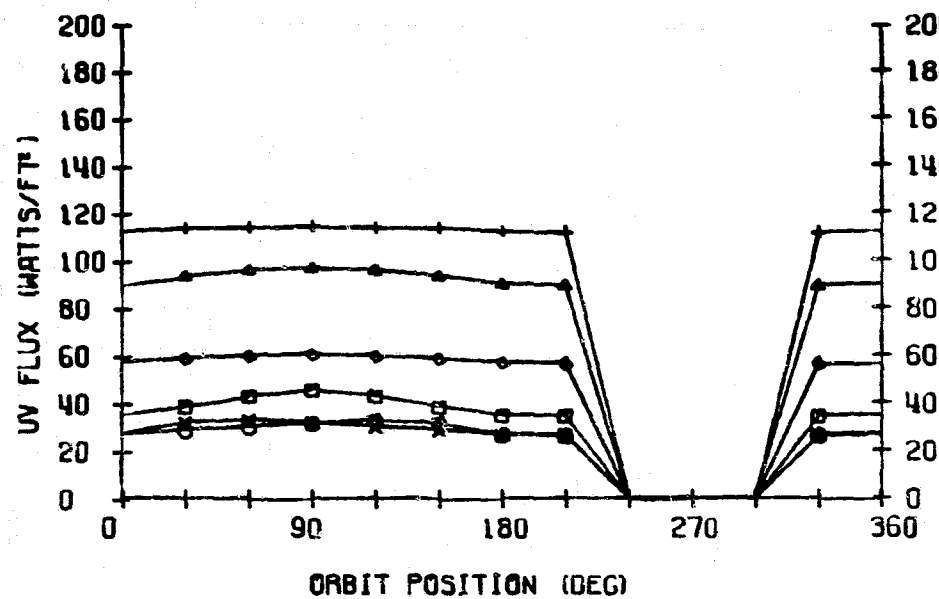
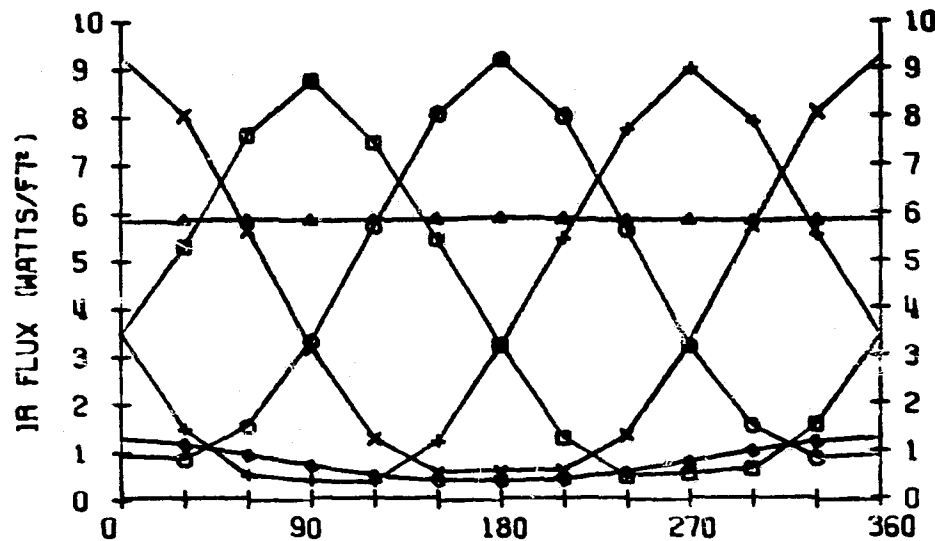
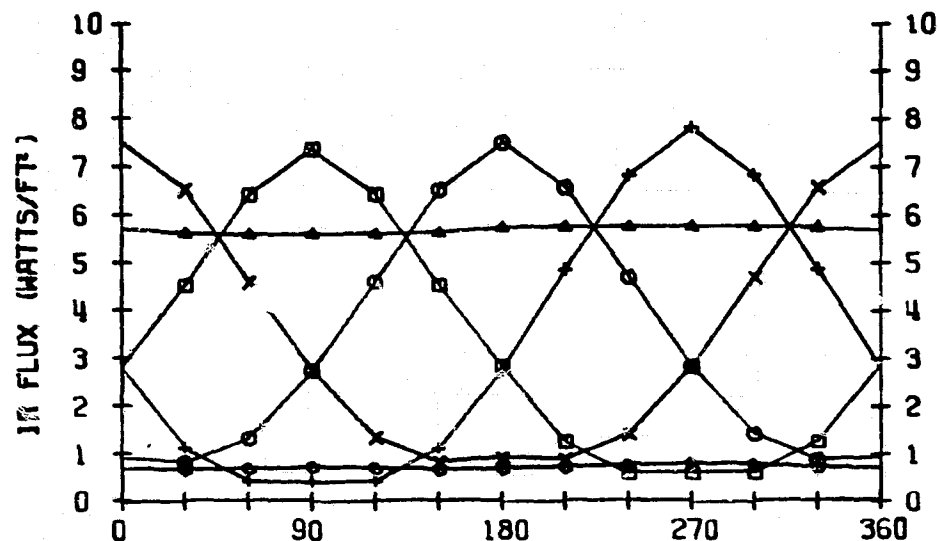
450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.3	3.8	4.4	2.2	2.0	0.7
R	+Y (○)	3.4	4.1	5.2	1.8	4.7	1.4
F	+Z (△)	5.7	5.8	5.8	4.5	5.2	3.3
L	-X (+)	3.4	3.9	4.5	2.4	4.7	2.5
U	-Y (x)	3.4	4.0	5.2	1.8	4.7	1.4
X	-Z (◇)	0.7	0.8	0.9	0.8	0.8	0.5
U	+X (□)	26.1	21.9	20.3	32.8	41.3	52.0
V	+Y (○)	19.6	14.4	12.8	30.2	19.4	40.1
F	+Z (△)	62.0	61.8	61.7	65.2	66.0	76.5
L	-X (+)	75.8	72.9	72.2	83.2	74.2	90.8
U	-Y (x)	19.7	18.5	13.2	30.2	19.4	40.1
X	-Z (◇)	39.0	32.6	33.4	46.5	44.3	55.1

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 1

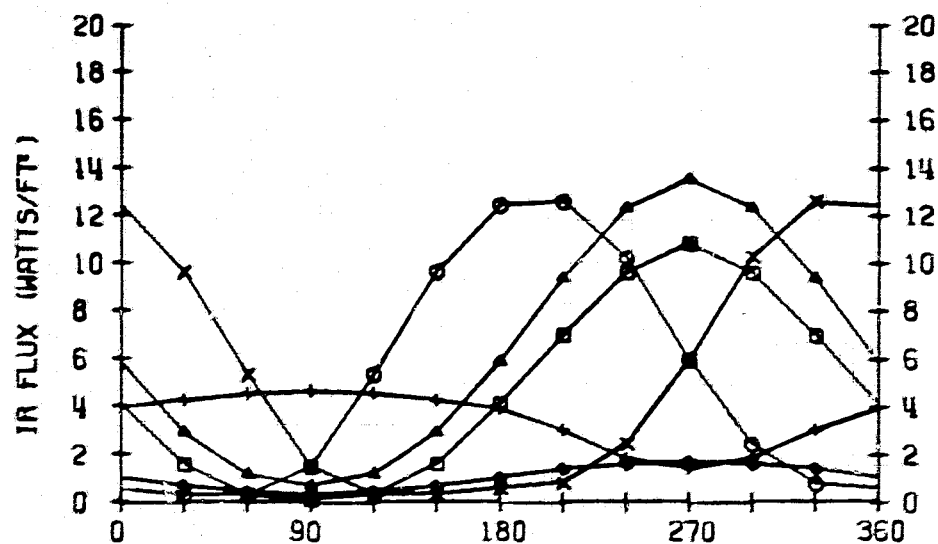
LOCATION 2



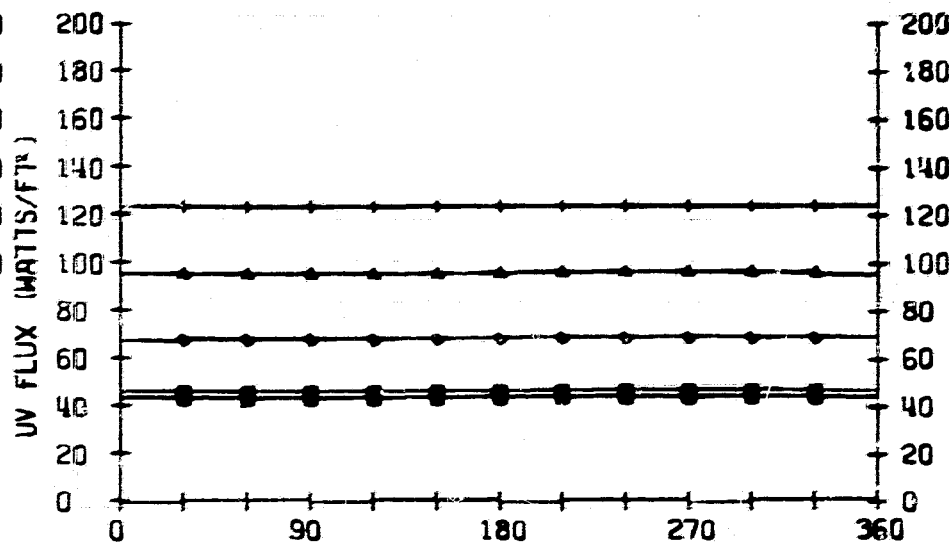
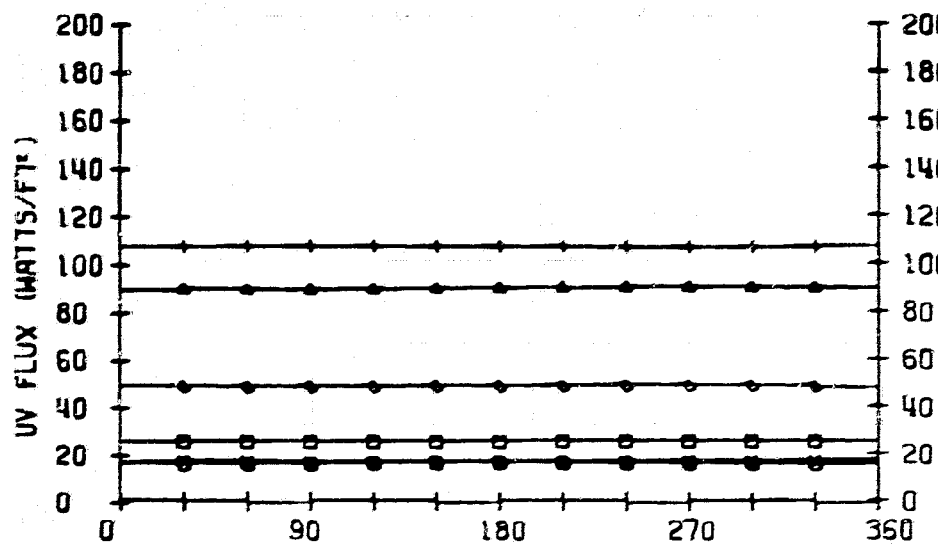
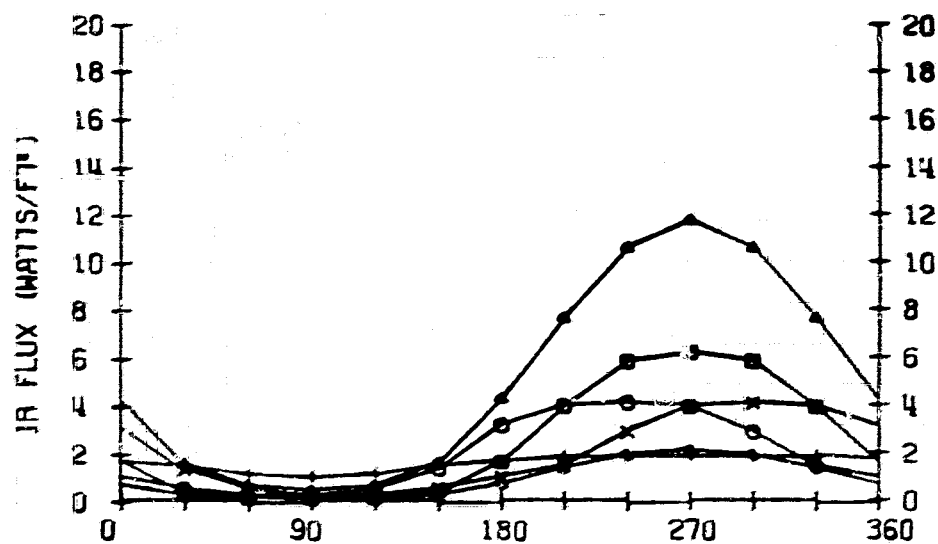
C-4

450 KM * BETA=90 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 3



LOCATION 4

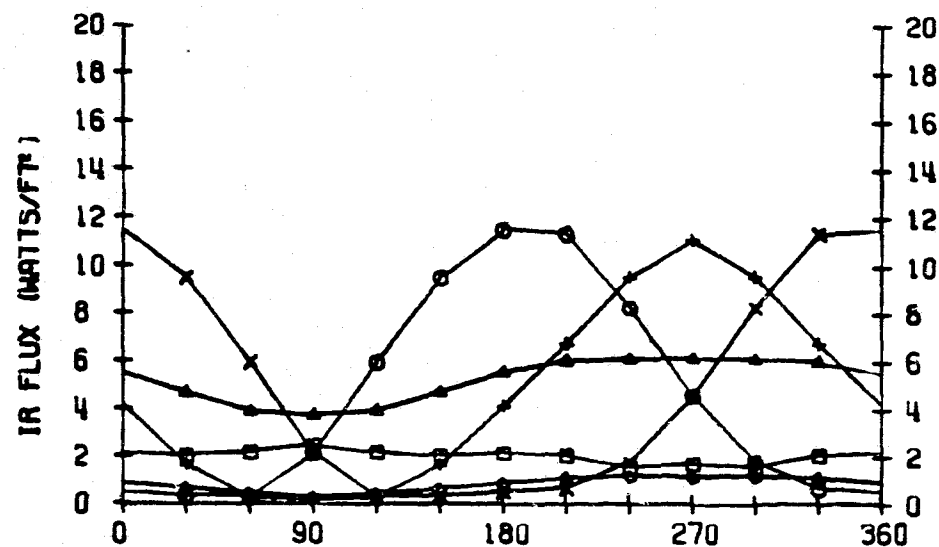


ORBIT POSITION (DEG)

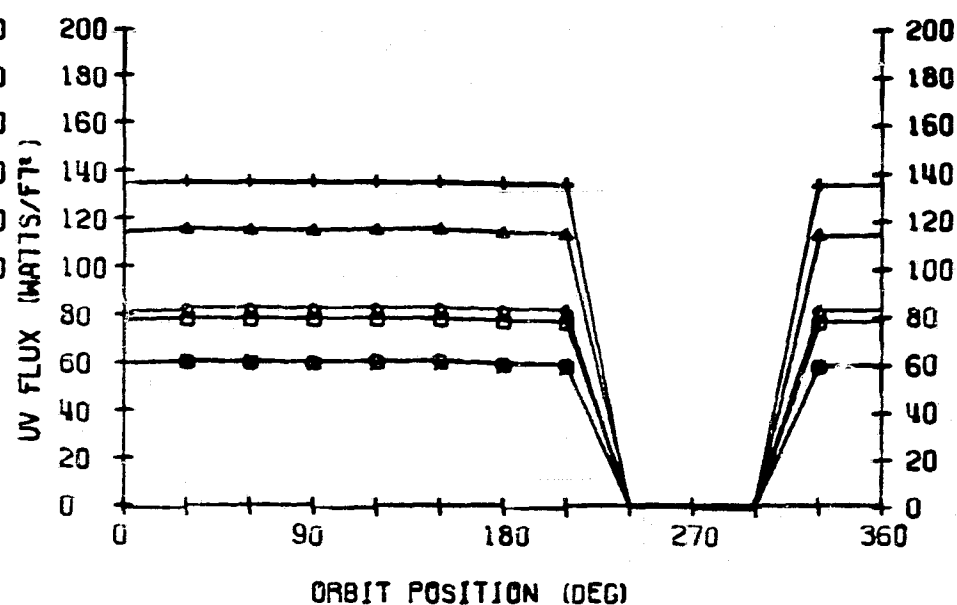
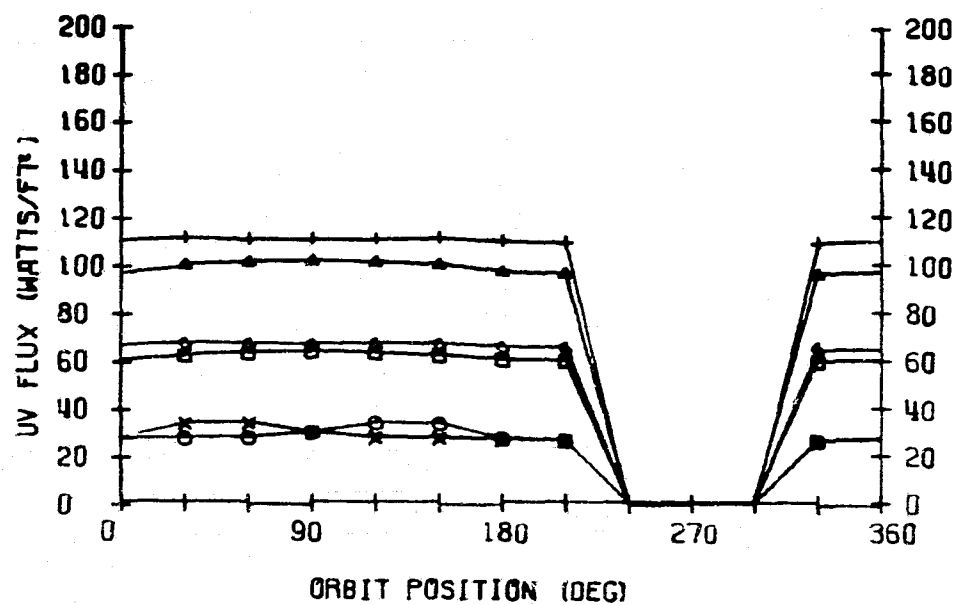
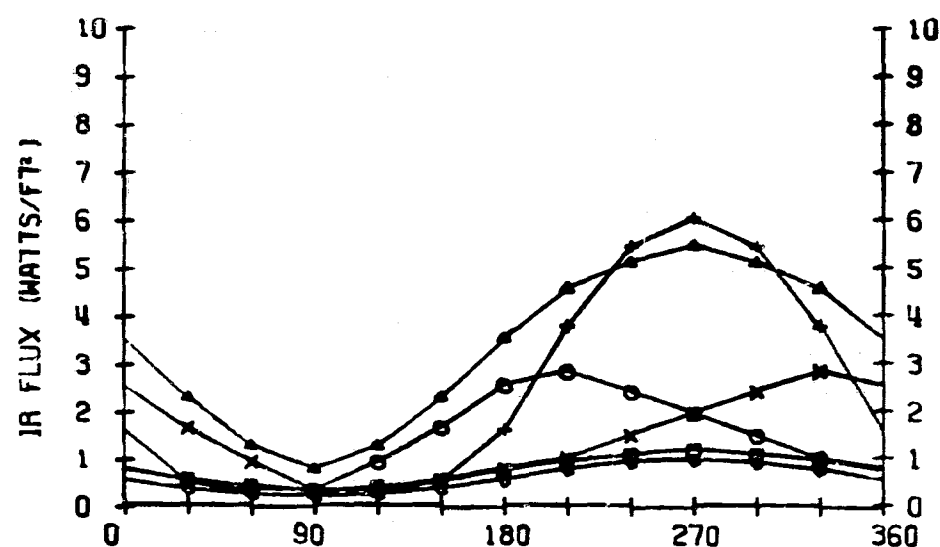
ORBIT POSITION (DEG)

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=-45 DEG * -X SOLAR INERTIAL * -45 DEG PITCH ABOUT Y-AXIS

		LCC. 1	LCC. 2	LCC. 3	LCC. 4	LCC. 5	LCC. 6
	SURFACE DIRECTION						
I	+X (□)	25.2	21.8	18.6	31.3	42.6	54.2
R	+Y (○)	21.8	17.0	11.8	31.1	21.3	46.9
F	+Z (△)	0.6	0.4	0.2	5.8	5.3	19.1
L	-X (+)	20.4	17.6	15.0	26.2	16.8	36.6
U	-Y (X)	21.7	18.6	12.3	30.9	21.4	46.9
X	-Z (◇)	38.0	37.0	35.4	41.8	50.7	59.7

FLUX DATA
FOR
ALTITUDE - 450 km
ORIENTATION NO. 3

Bay to sun, tail facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

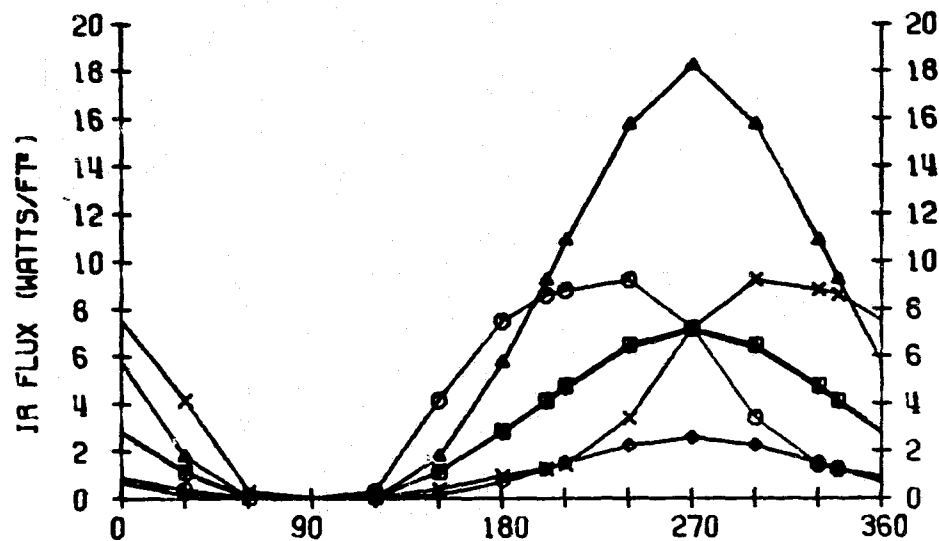
FOR

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

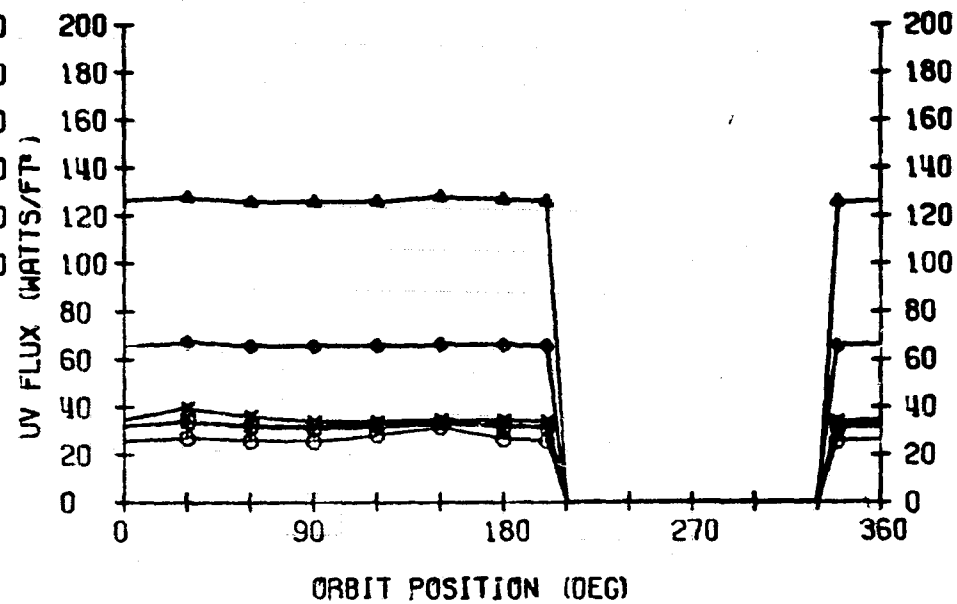
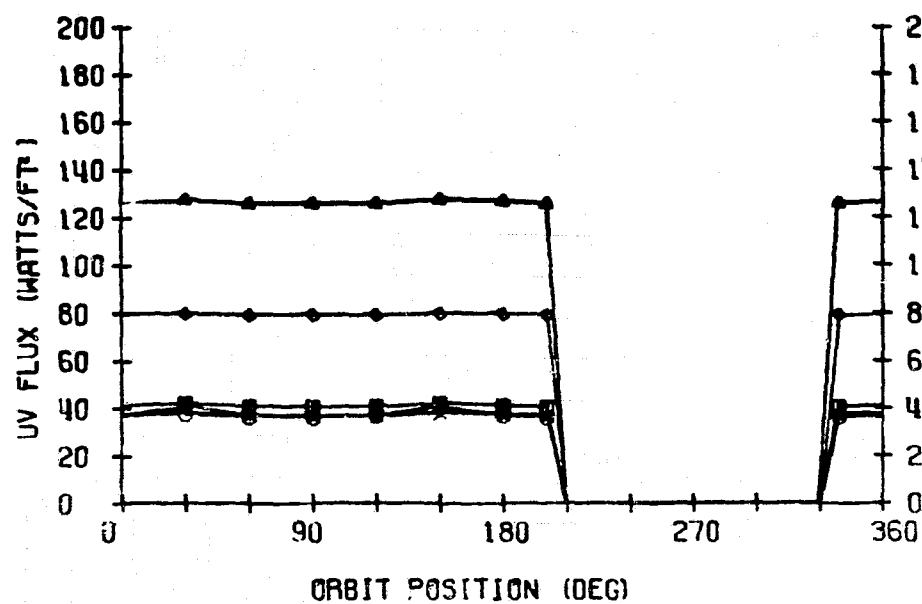
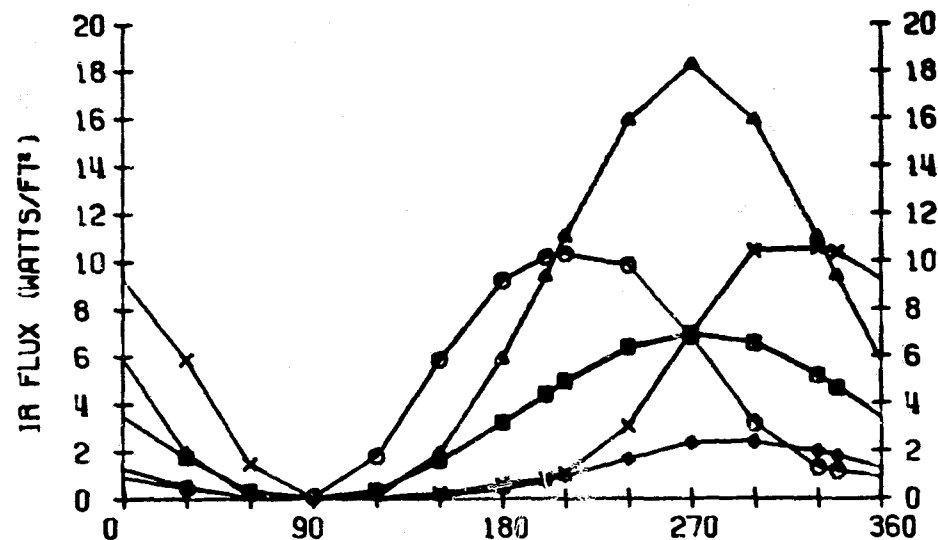
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.1	3.4	3.9	2.4	2.1	0.9
R	+Y (○)	3.6	4.1	5.2	2.2	4.8	1.7
F	+Z (Δ)	7.2	7.3	7.3	6.1	6.8	4.8
L	-X (+)	3.1	3.4	3.7	2.4	3.9	2.3
U	-Y (X)	3.6	4.1	5.2	2.2	4.8	1.7
X	-Z (◇)	1.0	1.0	1.1	1.1	0.9	0.8
U	+X (□)	25.2	19.9	17.4	35.3	13.3	34.5
V	+Y (○)	22.9	16.6	14.7	36.8	13.8	38.4
F	+Z (Δ)	77.7	77.5	77.5	81.7	78.5	84.6
L	-X (+)	23.3	19.8	19.4	32.2	18.9	35.7
U	-Y (X)	23.1	21.5	15.2	36.8	13.8	38.4
X	-Z (◇)	48.9	40.6	41.6	58.3	40.2	60.5

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

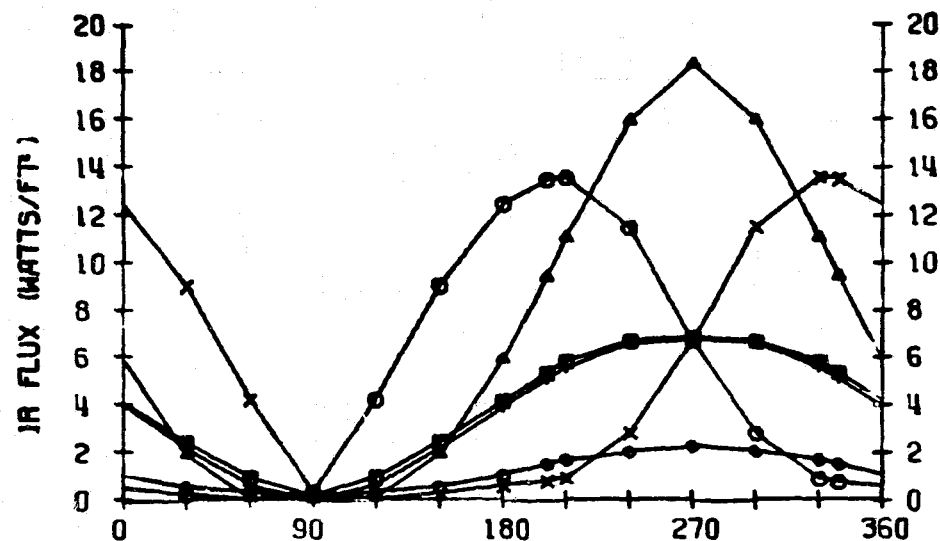


LOCATION 2

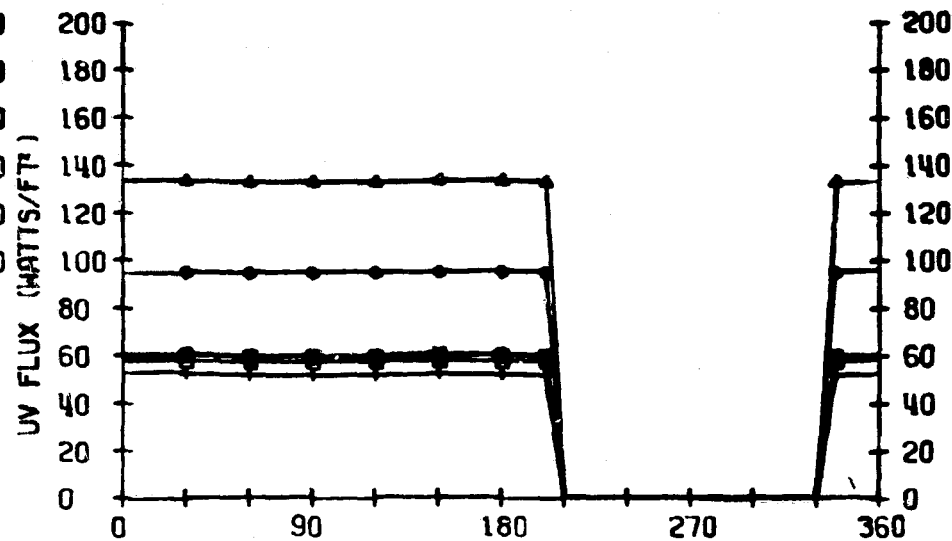
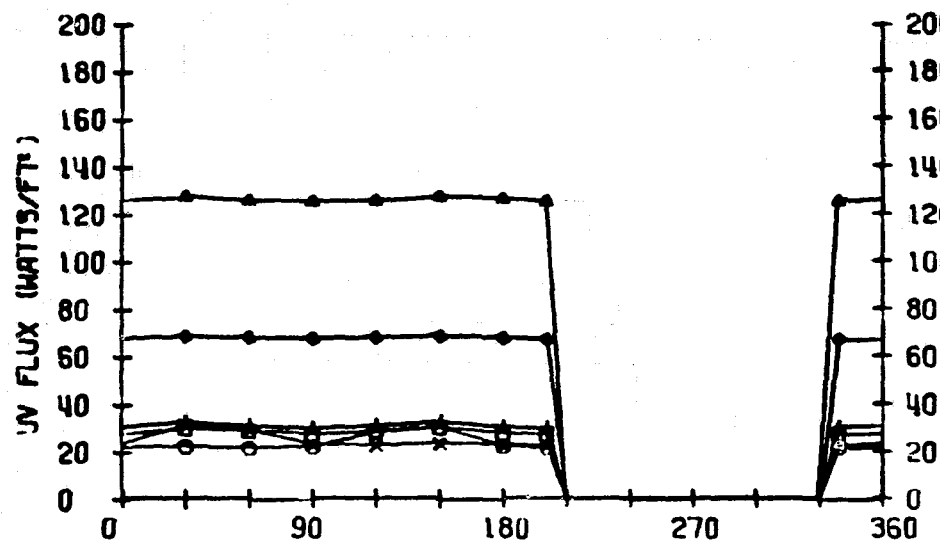
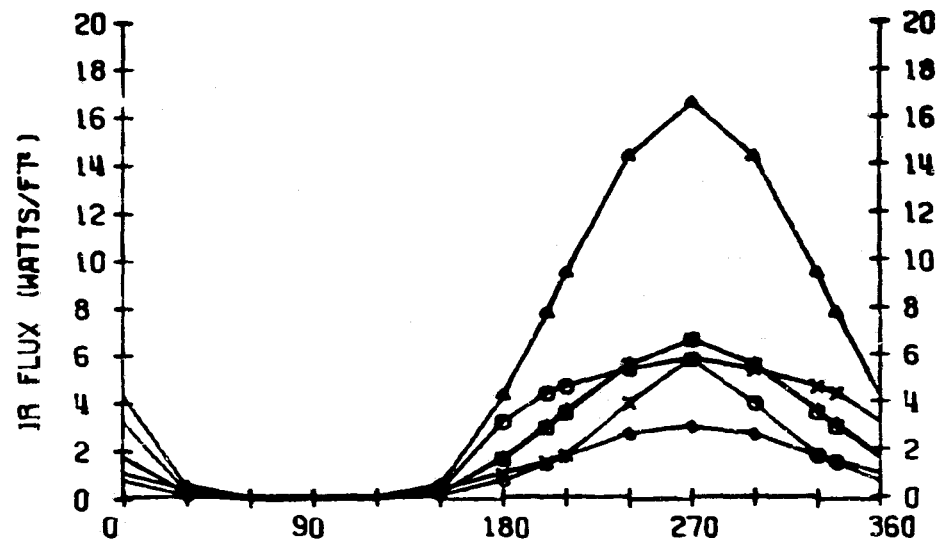


450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

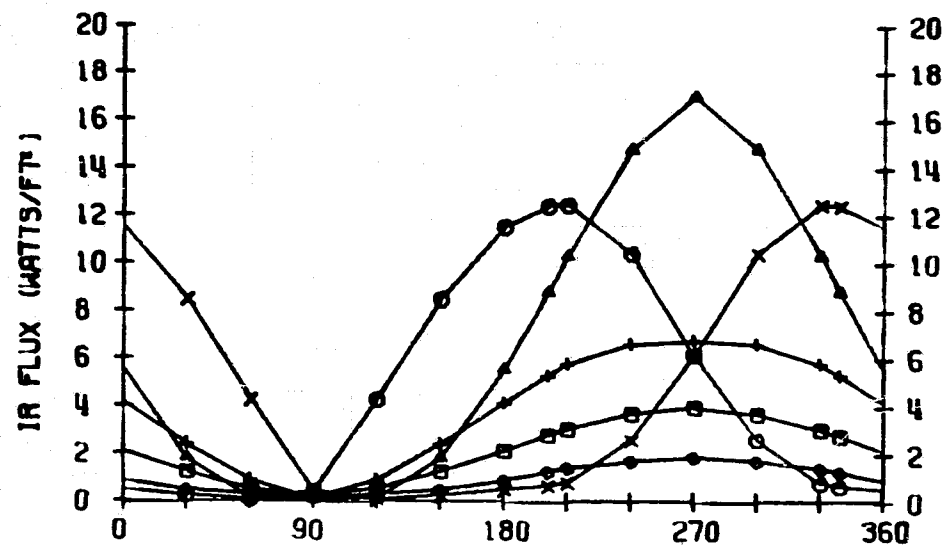


ORBIT POSITION (DEG)

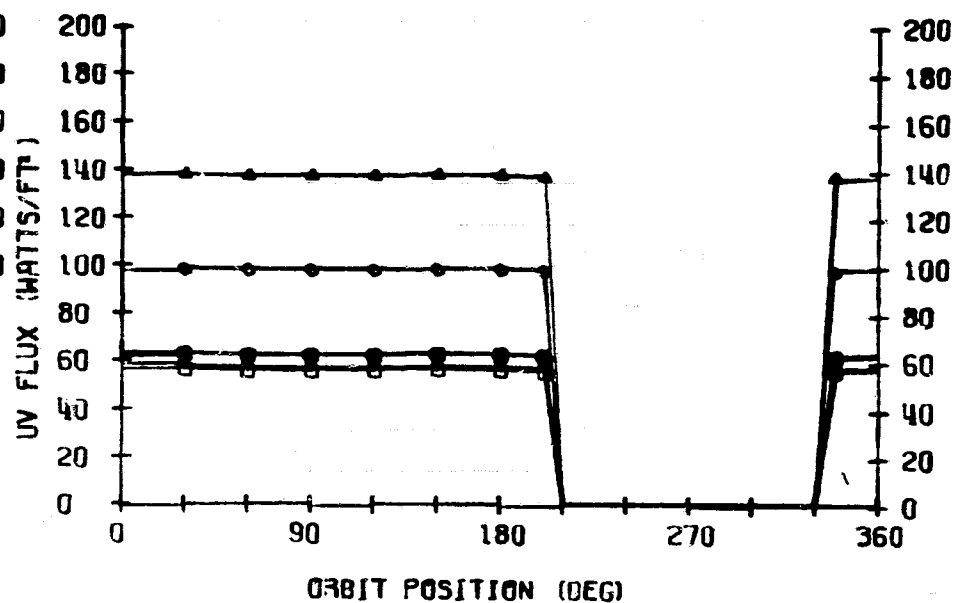
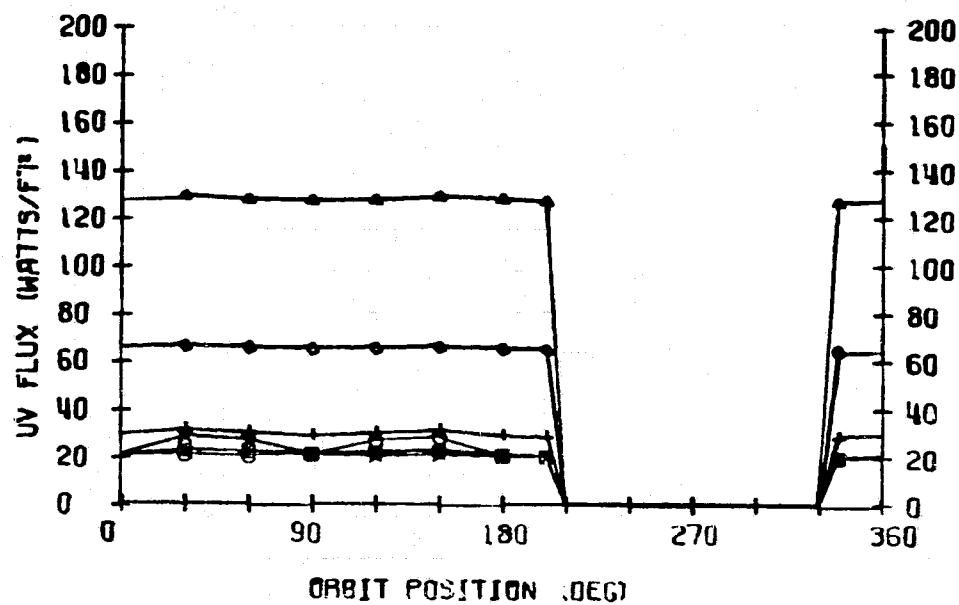
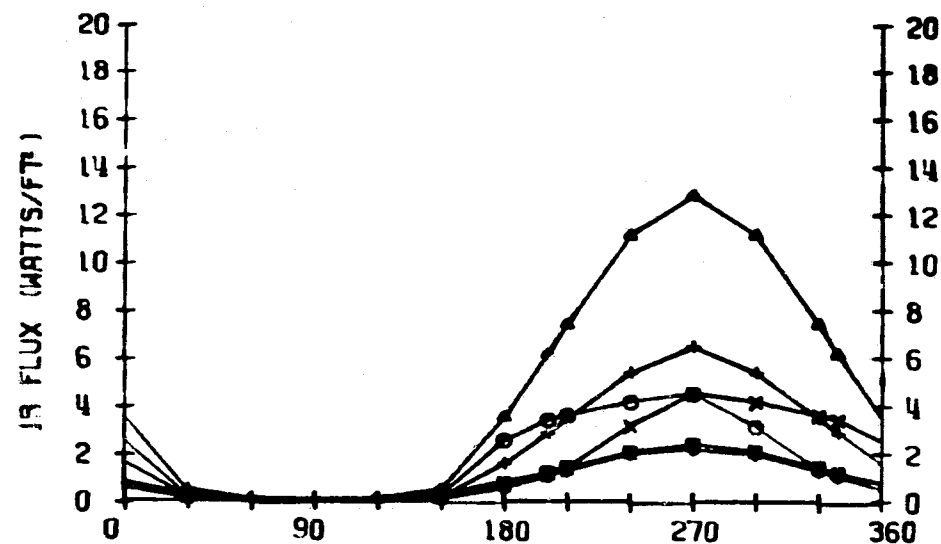
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	24.8	21.2	17.3	32.4	25.3	39.1
R	+Y (○)	24.2	18.7	13.1	34.8	16.0	39.2
F	+Z (Δ)	0.5	0.3	0.2	6.1	2.9	12.5
L	-X (+)	25.1	21.7	19.1	31.4	17.2	33.8
U	-Y (X)	24.1	20.6	13.6	34.7	16.0	39.3
X	-Z (◇)	42.9	41.3	39.6	47.5	42.0	53.1

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

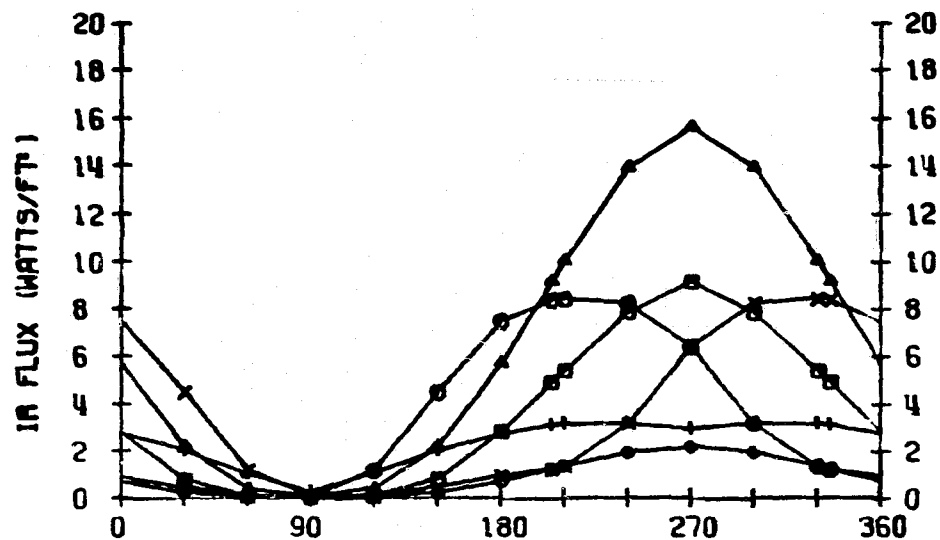
FOR

450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

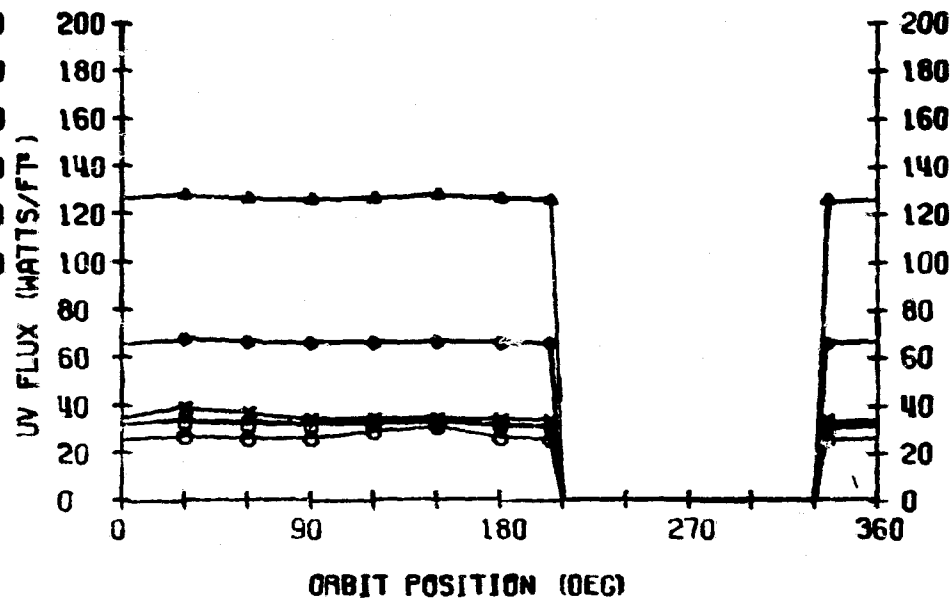
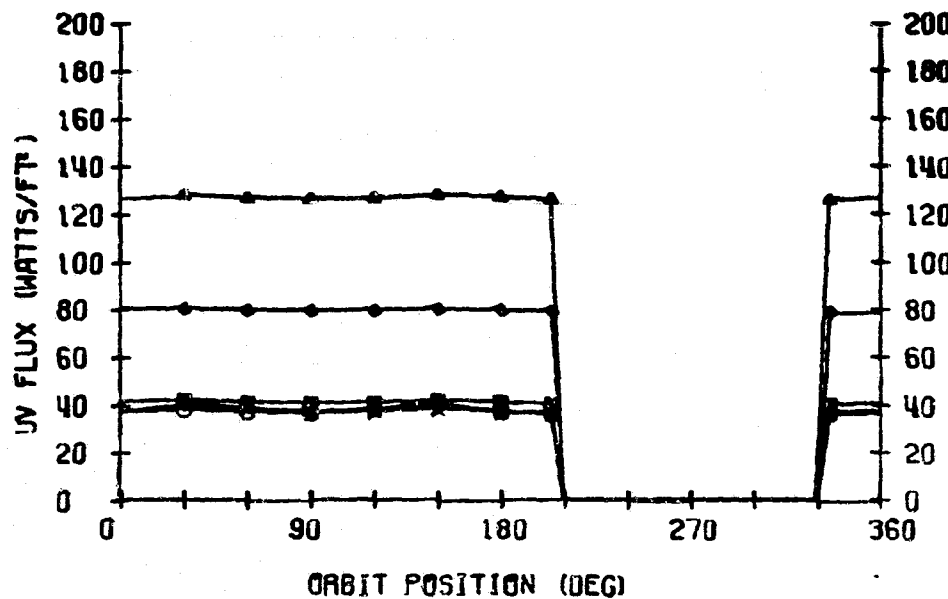
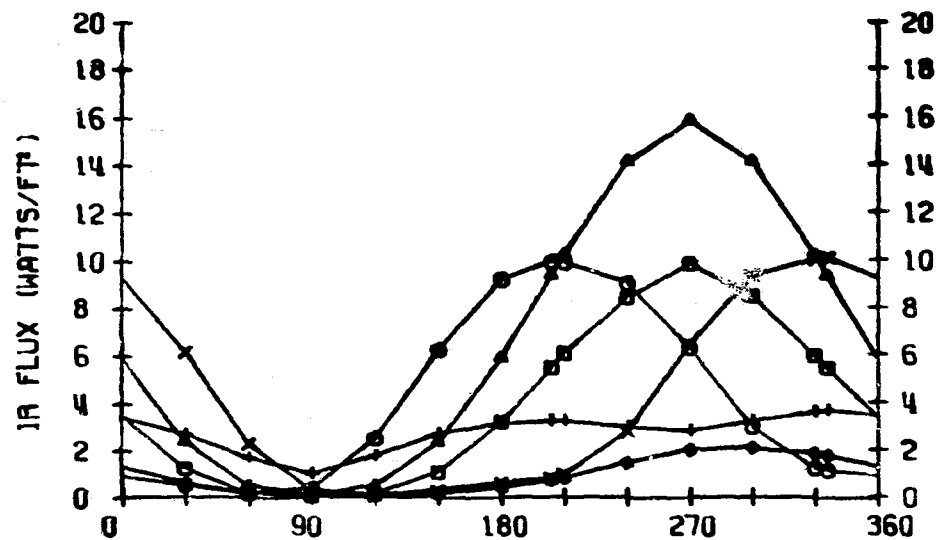
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.6	4.0	4.6	2.6	2.1	0.8
R	+Y (○)	3.5	4.1	5.2	2.0	4.7	1.5
F	+Z (Δ)	6.7	6.8	6.8	5.6	6.1	4.1
L	-X (+)	2.3	2.7	3.3	1.7	3.5	1.6
U	-Y (X)	3.5	4.0	5.2	2.0	4.7	1.5
X	-Z (◇)	0.9	0.9	1.1	1.0	0.8	0.7
U	+X (□)	26.0	20.4	17.6	36.4	14.1	35.7
V	+Y (○)	23.7	17.2	15.1	38.0	14.4	39.8
F	+Z (Δ)	80.1	80.0	79.9	84.3	81.1	87.4
L	-X (+)	24.5	21.0	20.9	33.4	20.4	37.1
U	-Y (X)	23.9	22.3	15.6	38.0	14.4	39.8
X	-Z (◇)	50.4	41.9	42.9	60.1	41.6	62.4

450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

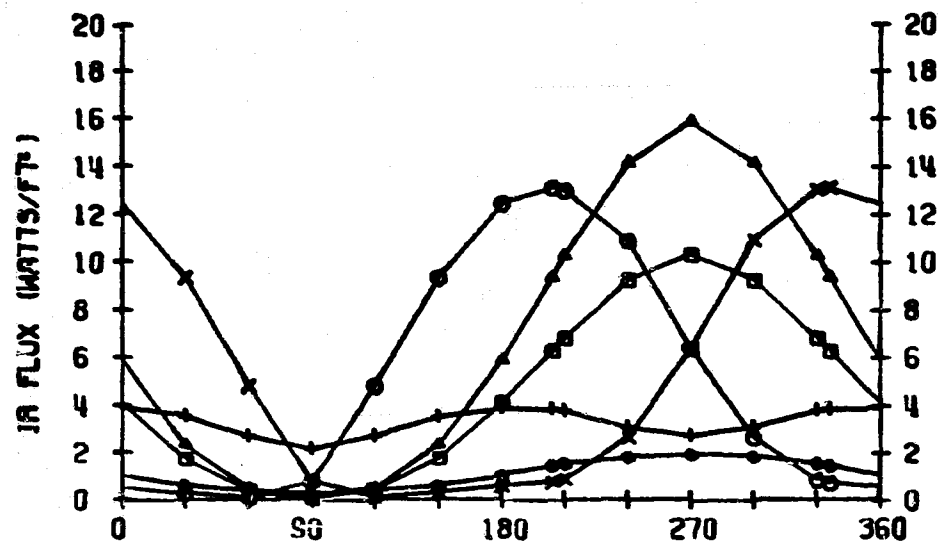


LOCATION 2

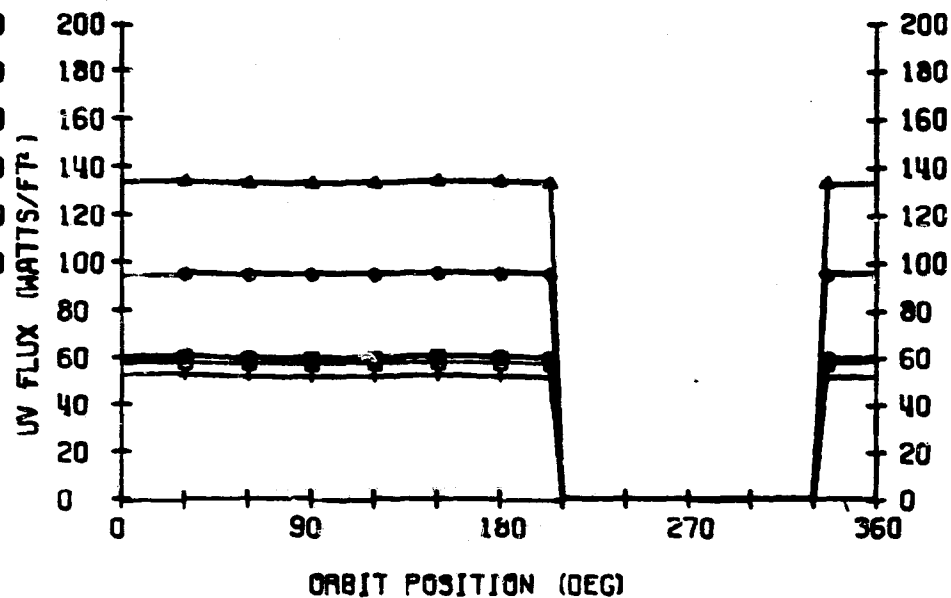
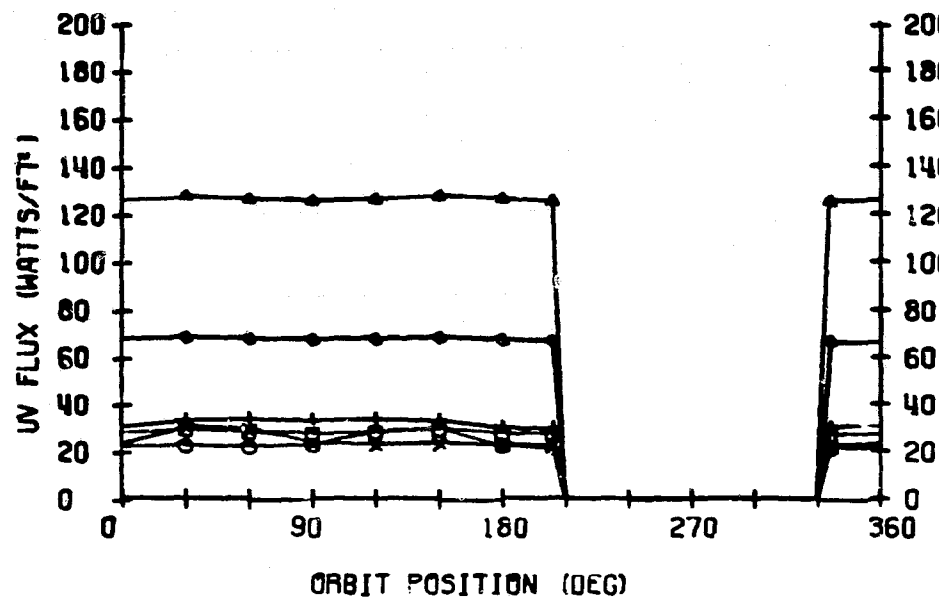
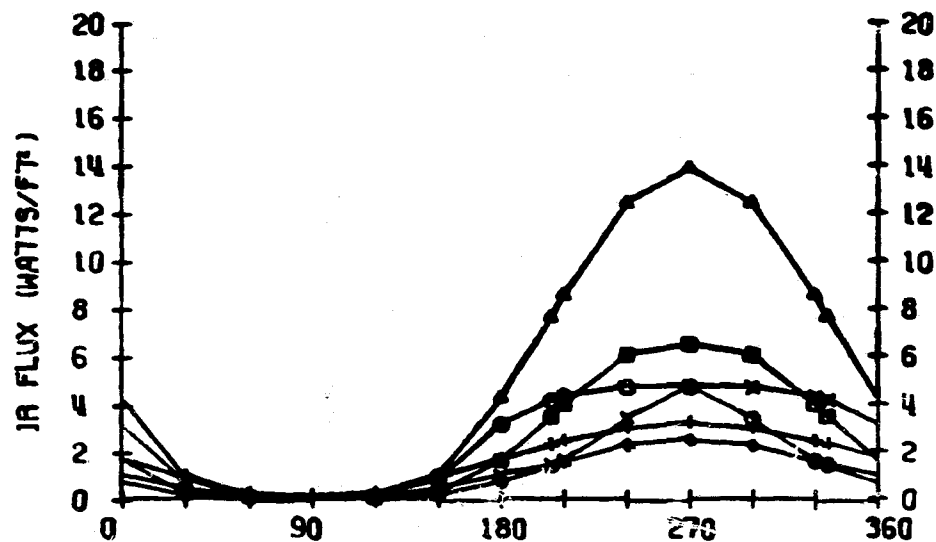


450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

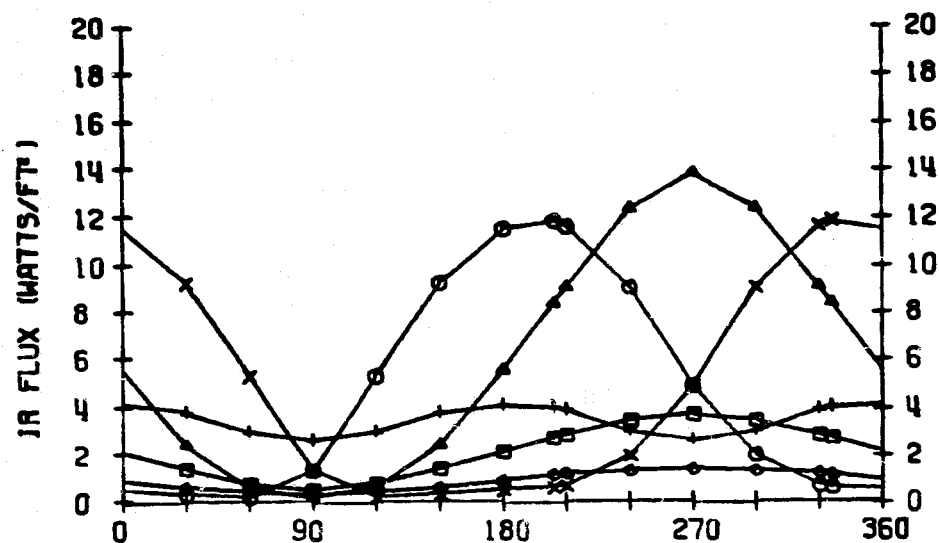


LOCATION 4

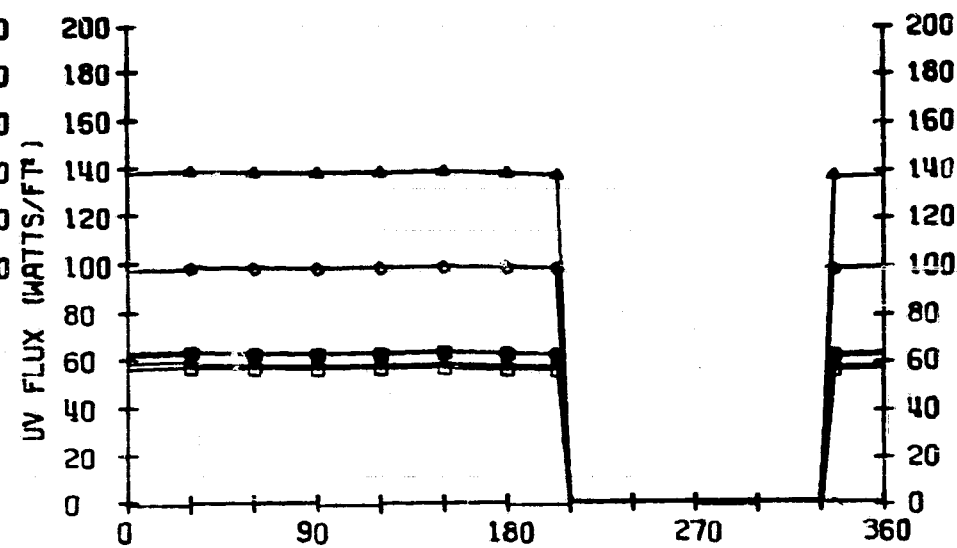
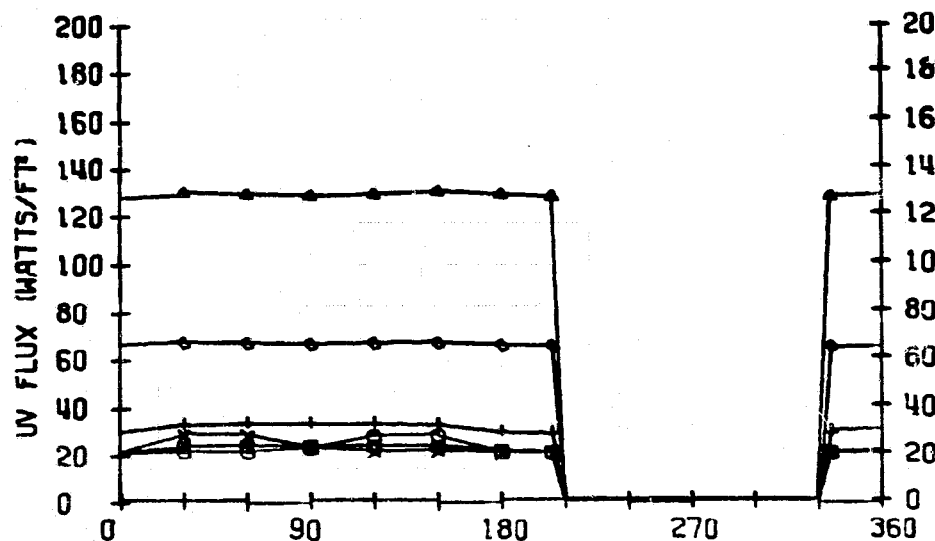
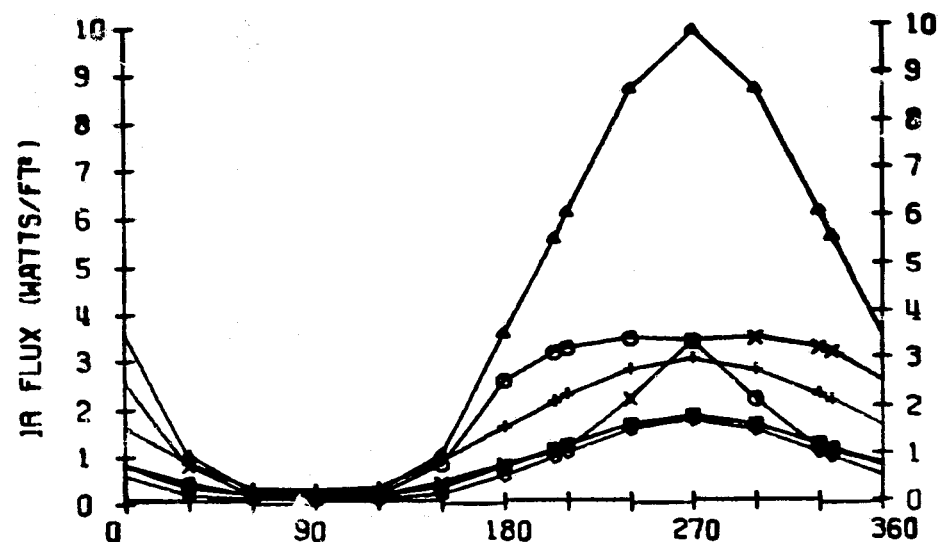


450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	24.8	21.3	17.3	32.4	25.3	39.1
R	+Y (○)	24.3	18.8	13.1	34.9	16.0	39.2
F	+Z (Δ)	0.5	0.3	0.2	6.1	2.9	12.5
L	-X (+)	25.3	21.9	19.2	31.6	17.2	33.8
U	-Y (X)	24.2	20.7	13.6	34.8	16.0	39.2
X	-Z (◇)	43.0	41.4	39.7	47.6	42.0	53.1

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

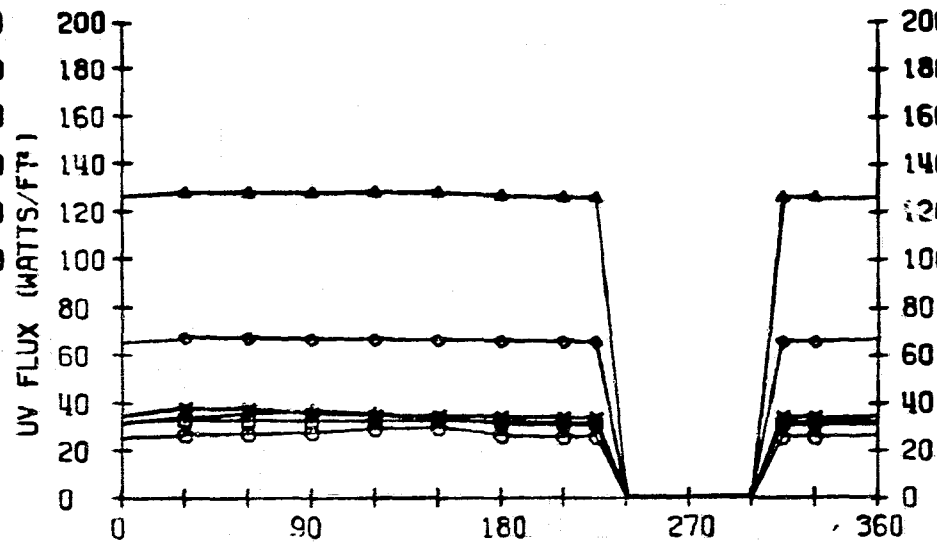
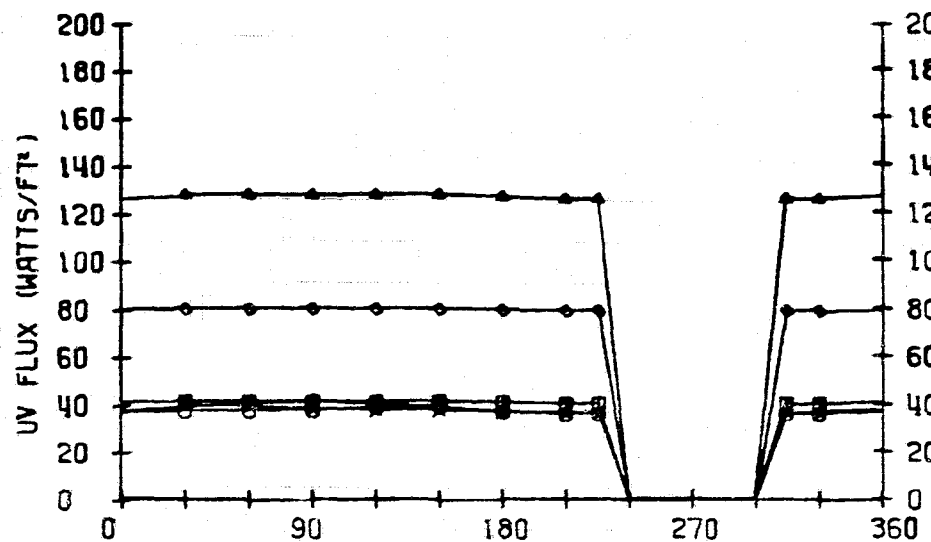
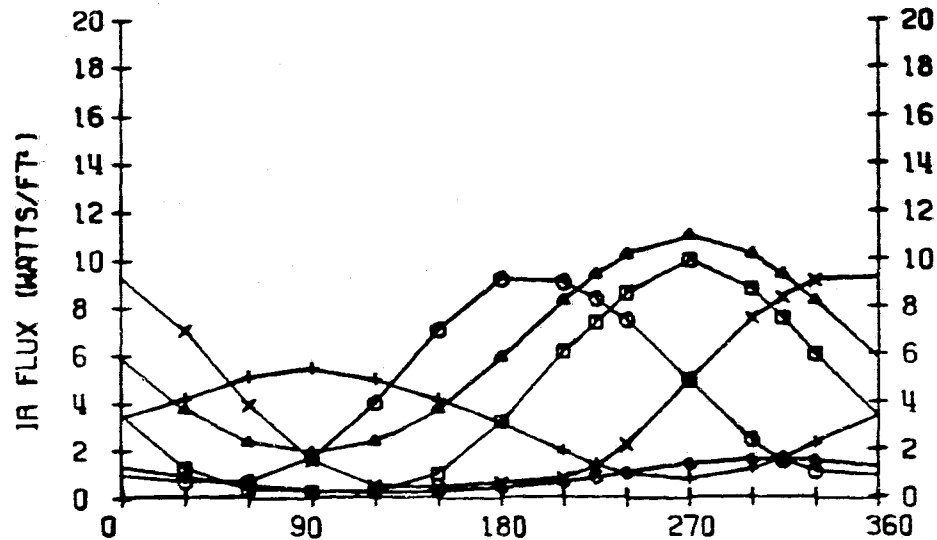
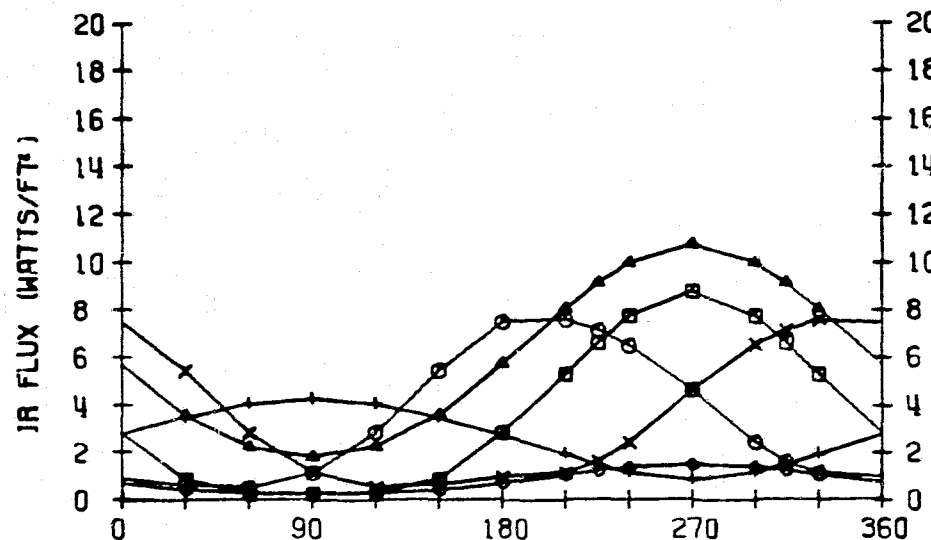
450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.6	4.1	4.7	2.5	2.1	0.8
R	+Y (○)	3.4	4.1	5.2	1.9	4.7	1.4
F	+Z (Δ)	6.0	6.1	6.1	4.8	5.4	3.3
L	-X (+)	2.7	3.2	3.8	1.8	4.0	1.8
U	-Y (χ)	3.4	4.0	5.2	1.9	4.7	1.4
X	-Z (◇)	0.8	0.8	1.0	0.8	0.8	0.5
U	+X (□)	30.9	24.2	20.8	43.5	16.6	42.8
V	+Y (○)	28.3	20.2	17.5	45.4	16.6	47.6
F	+Z (Δ)	95.6	95.4	95.3	100.6	96.7	104.3
L	-X (+)	29.7	25.4	25.0	40.4	24.5	44.9
U	-Y (χ)	28.4	26.4	18.1	45.4	16.6	47.6
X	-Z (◇)	60.1	49.9	51.0	71.8	49.6	74.5

450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

LOCATION 2

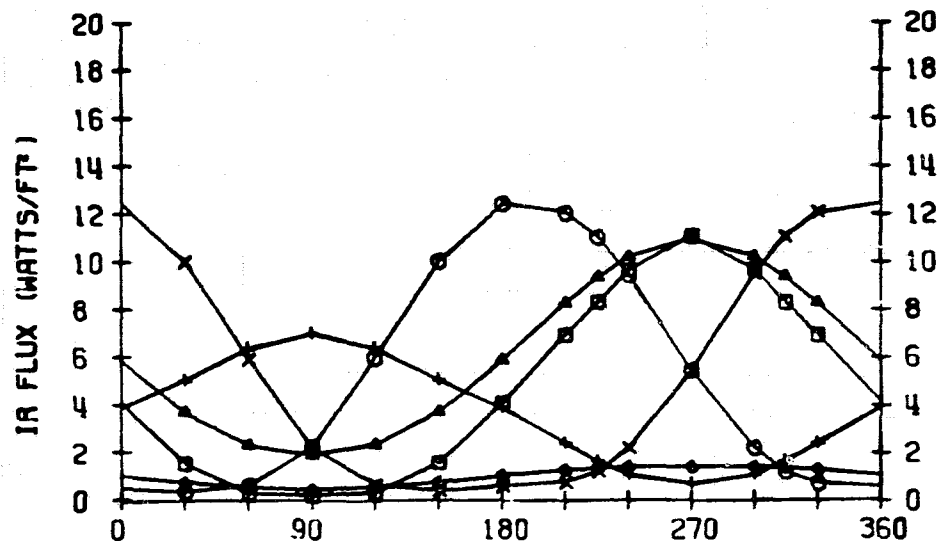


ORBIT POSITION (DEG)

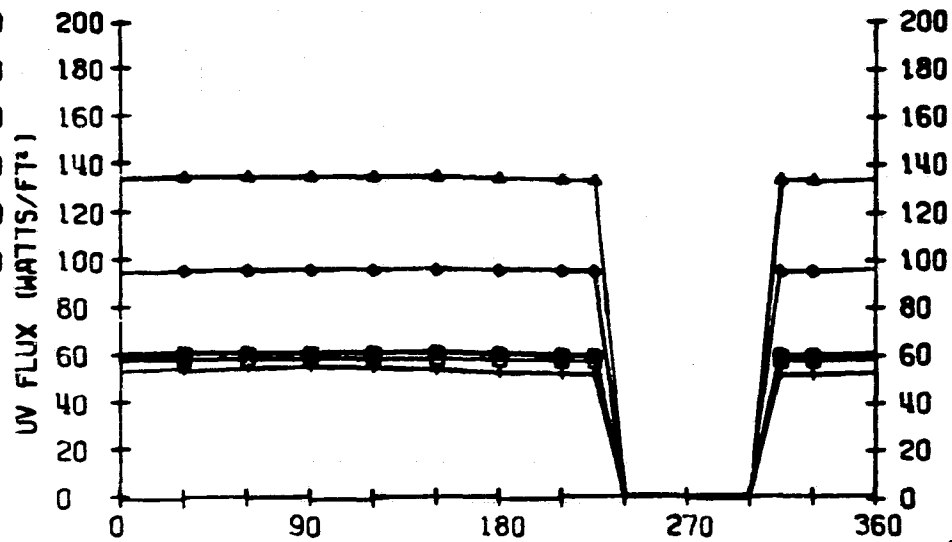
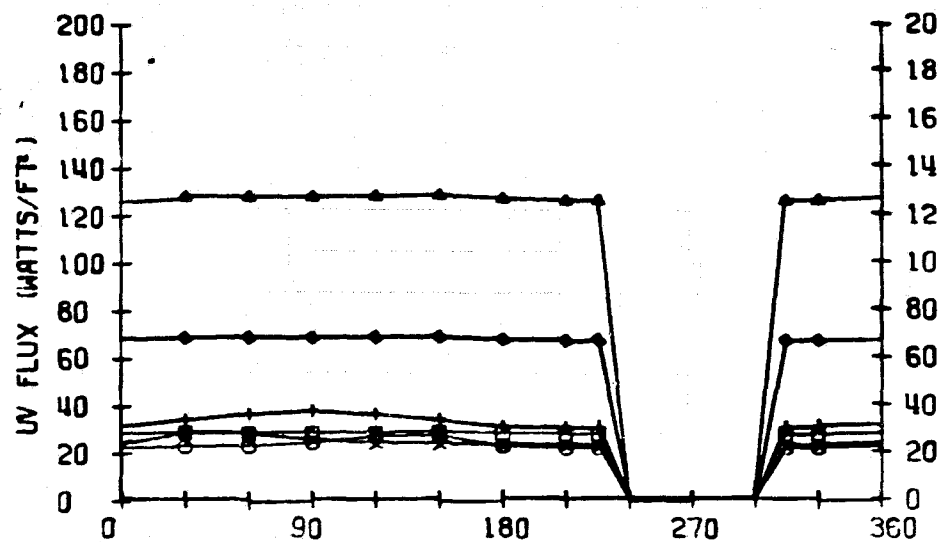
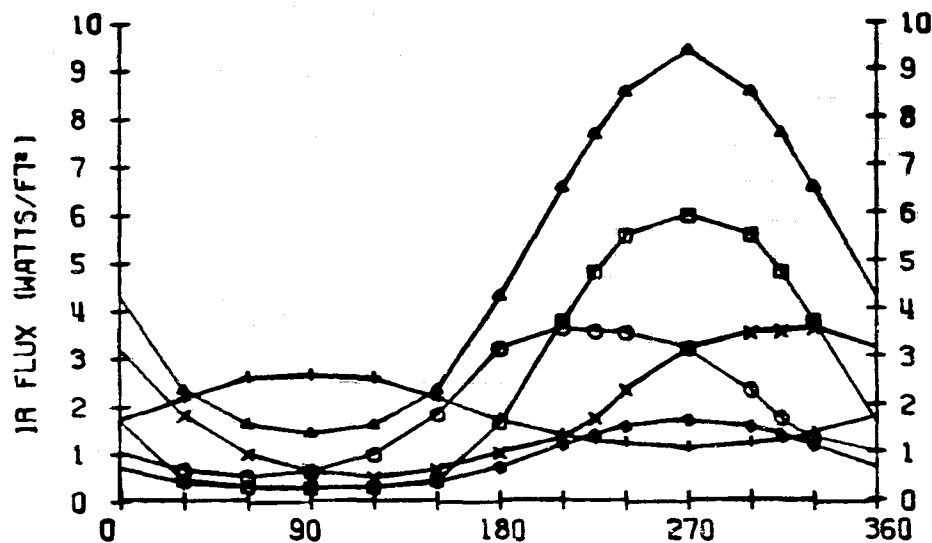
ORBIT POSITION (DEG)

450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

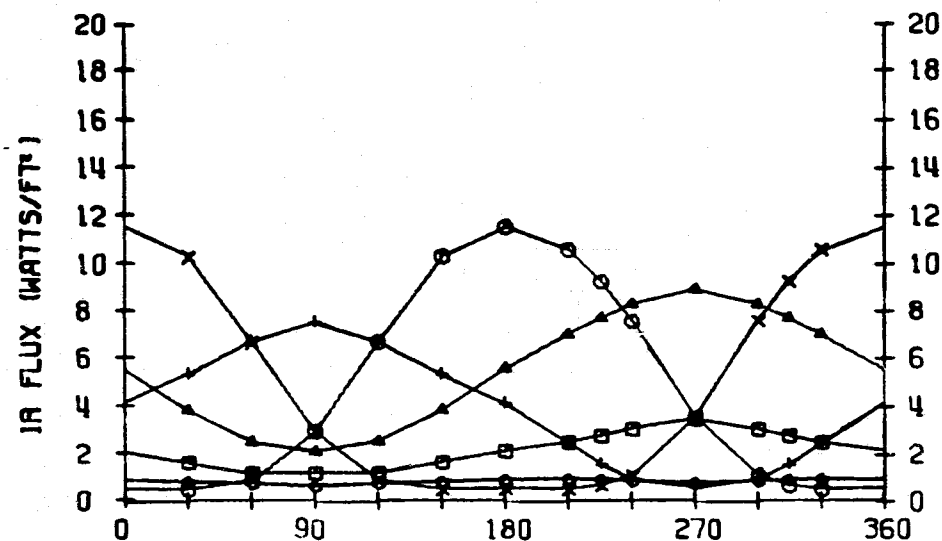


ORBIT POSITION (DEG)

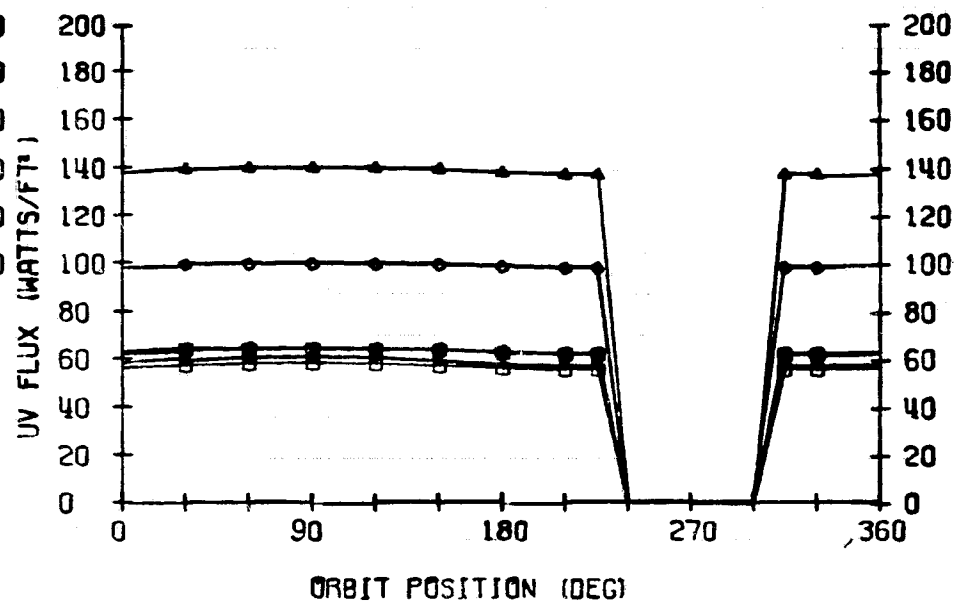
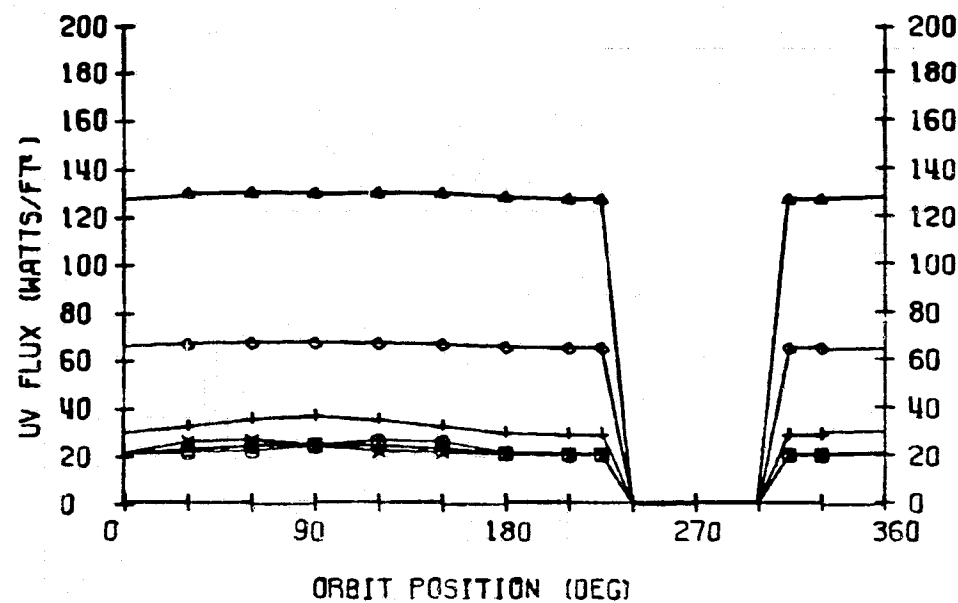
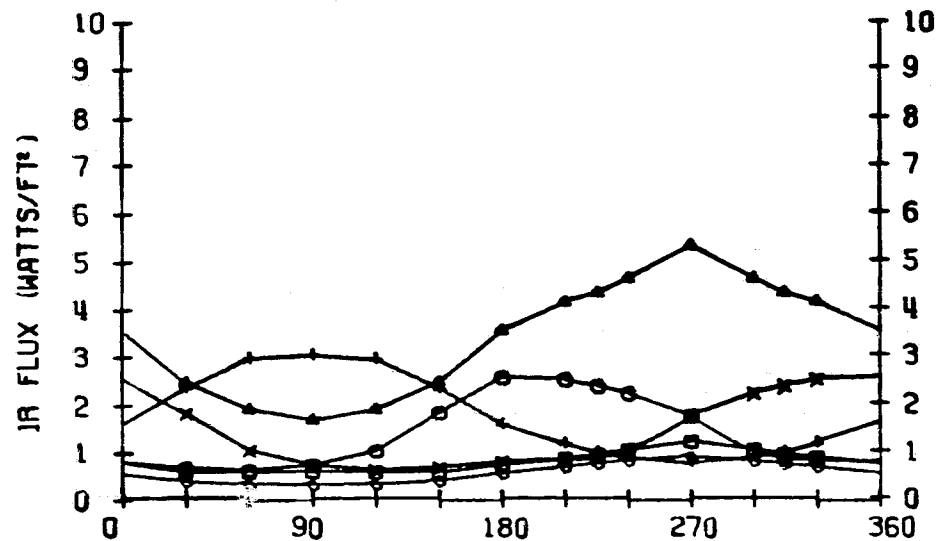
ORBIT POSITION (DEG)

450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

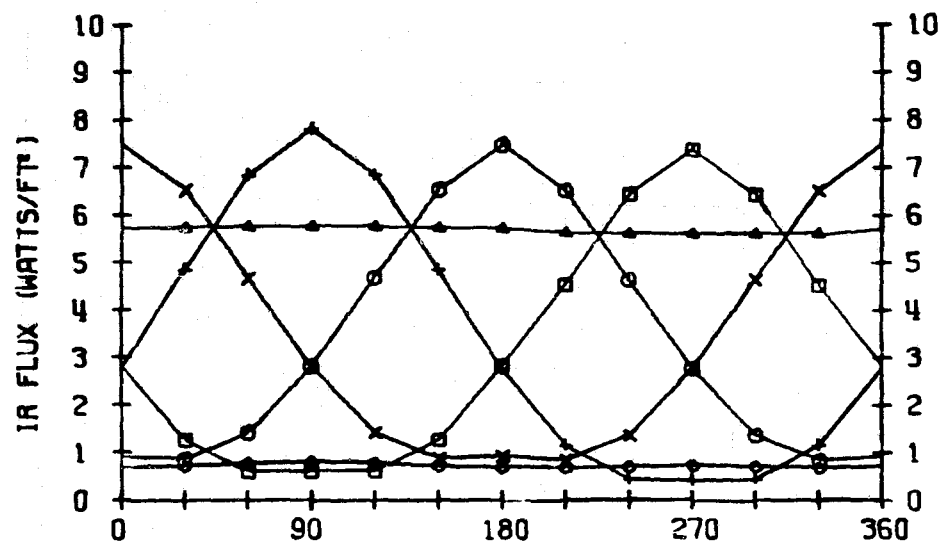
FOR

450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

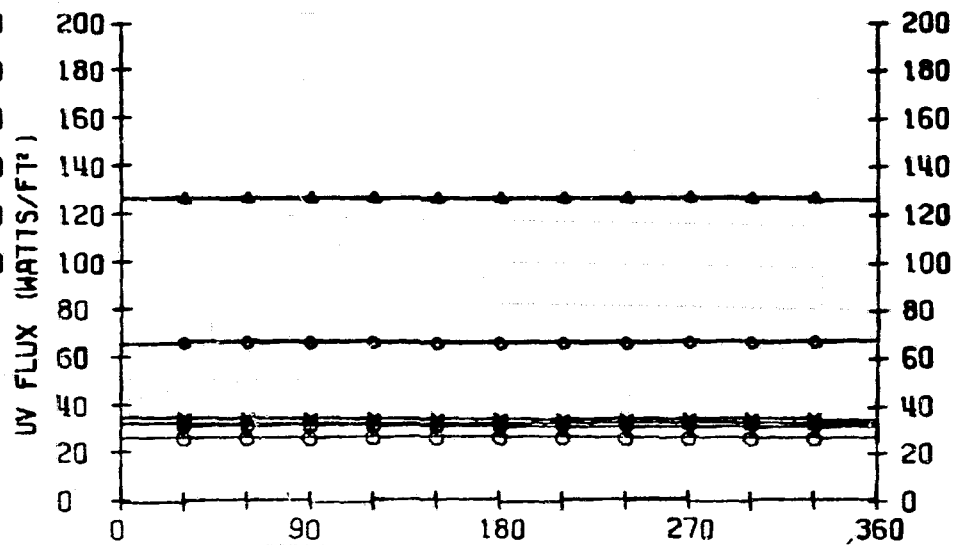
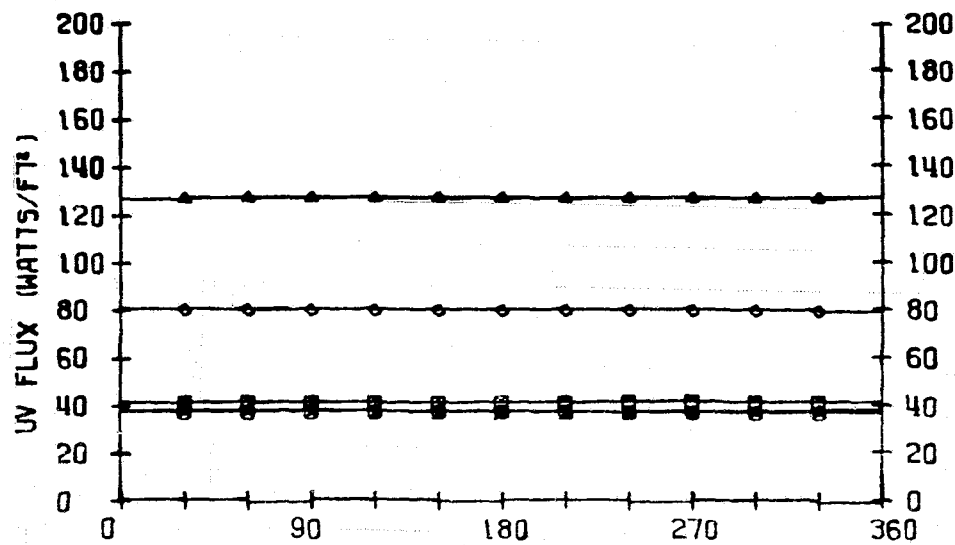
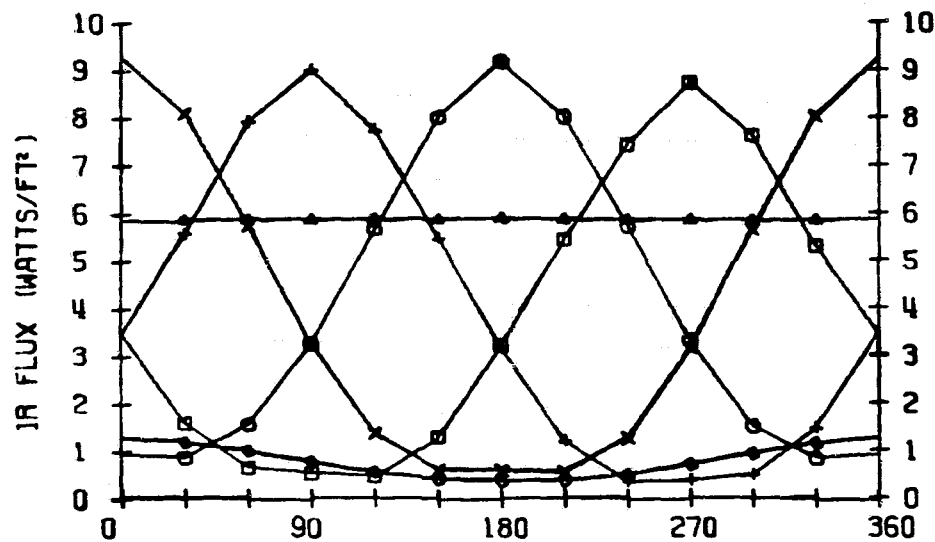
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	29.6	25.4	20.7	38.7	30.4	47.1
R	+Y (○)	28.9	22.3	15.6	41.6	19.2	47.1
F	+Z (Δ)	0.6	0.4	0.3	7.3	3.5	15.1
L	-X (+)	30.1	26.0	22.9	37.6	20.6	40.6
U	-Y (X)	28.7	24.6	16.1	41.4	19.2	47.1
X	-Z (◇)	51.3	49.3	47.3	56.8	50.4	63.8

450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

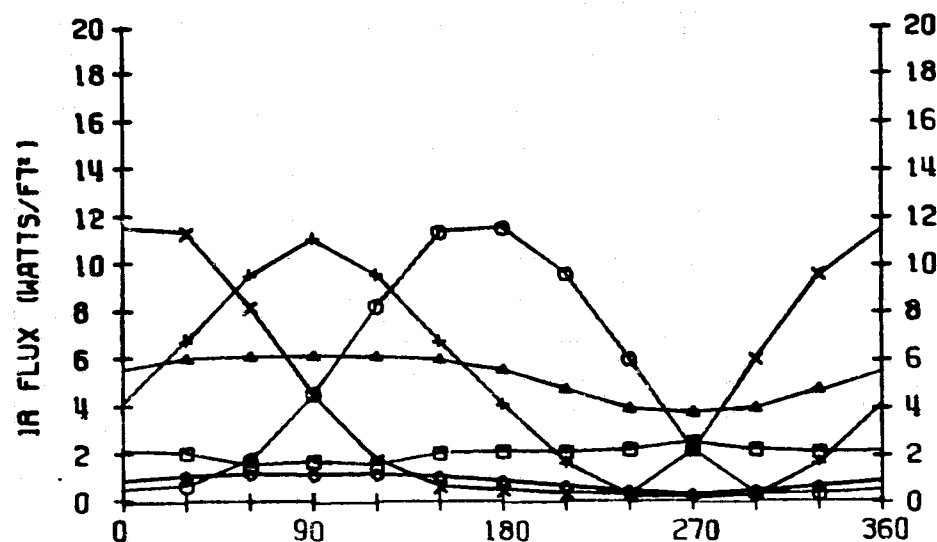
FOR

450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

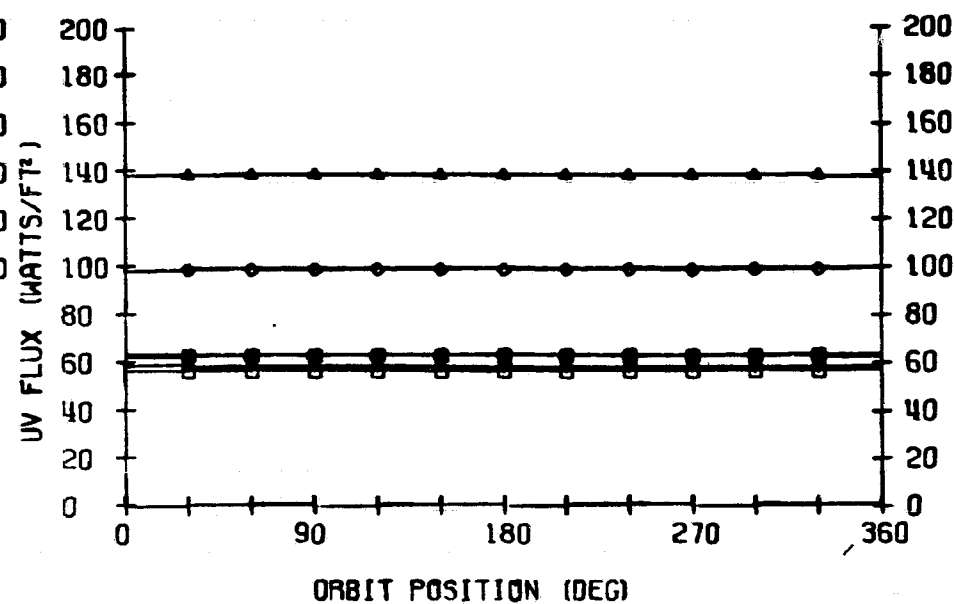
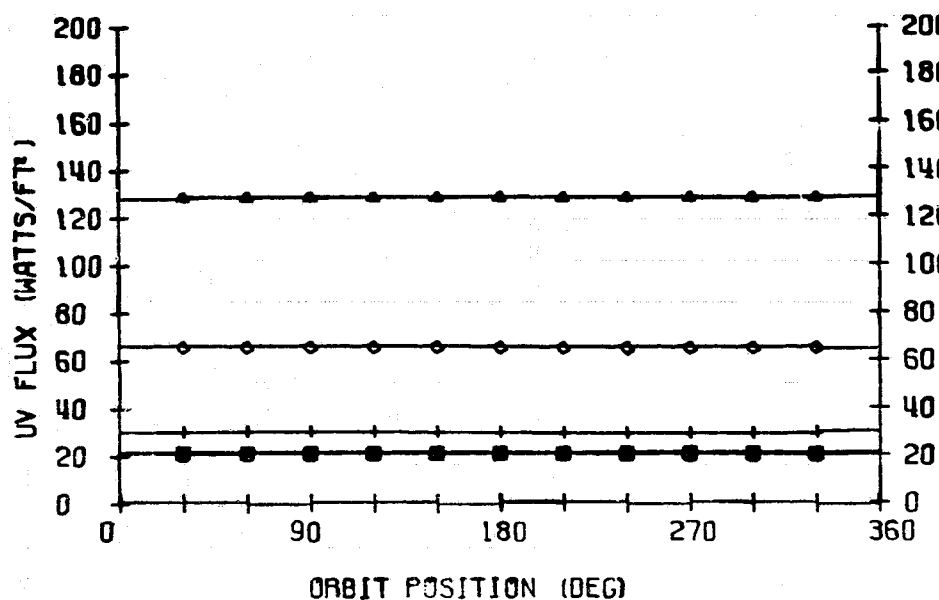
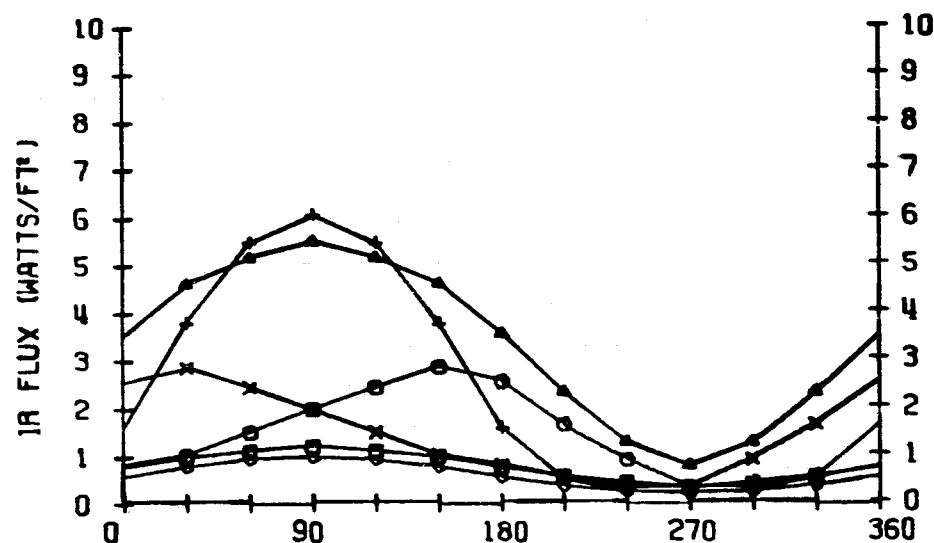
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.3	3.8	4.4	2.2	2.0	0.7
R	+Y (○)	3.4	4.1	5.2	1.8	4.7	1.4
F	+Z (Δ)	5.7	5.8	5.8	4.5	5.2	3.3
L	-X (+)	3.4	3.9	4.5	2.4	4.7	2.5
U	-Y (x)	3.4	4.0	5.2	1.8	4.7	1.4
X	-Z (◇)	0.7	0.8	0.9	0.8	0.8	0.5
U	+X (□)	41.0	32.1	27.5	57.7	20.8	56.1
V	+Y (○)	36.8	25.9	21.9	60.0	20.4	62.6
F	+Z (Δ)	126.5	126.2	126.2	133.4	127.7	137.8
L	-X (+)	37.9	31.9	30.9	52.7	29.9	58.3
U	-Y (x)	37.1	34.2	22.7	60.0	20.4	62.6
X	-Z (◇)	79.7	66.0	67.5	95.2	65.2	98.6

450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5

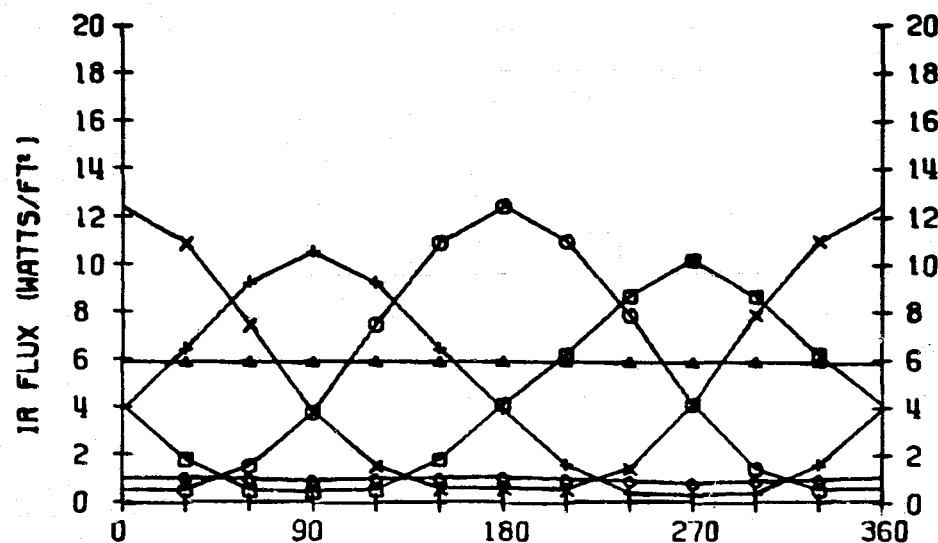


LOCATION 6

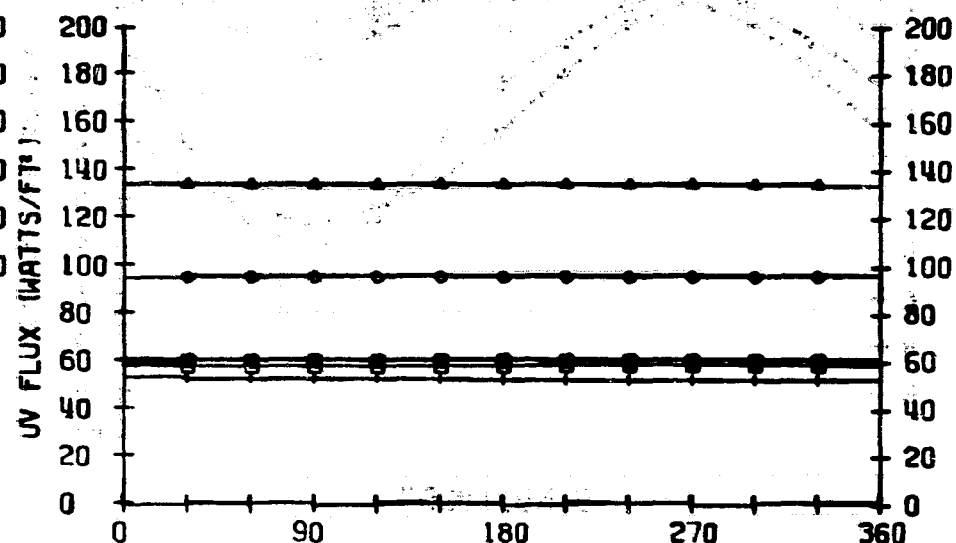
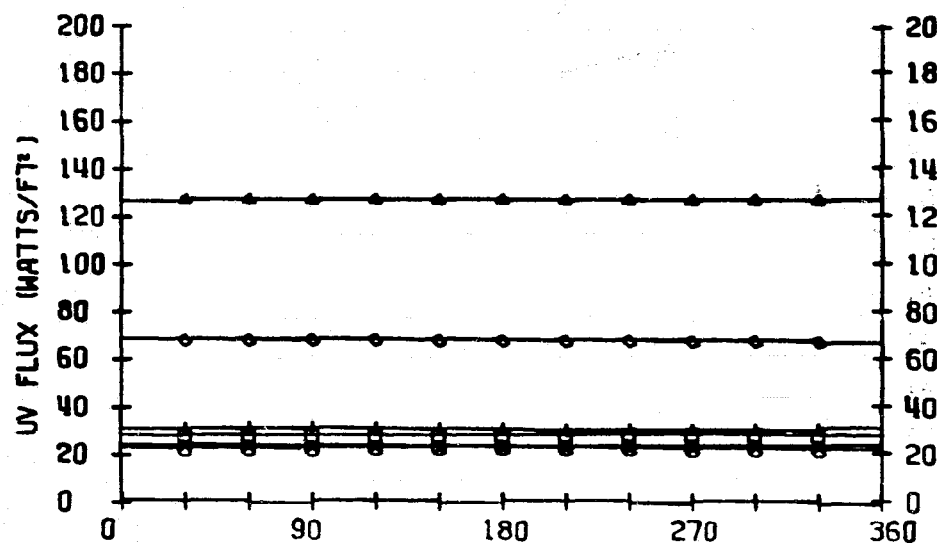
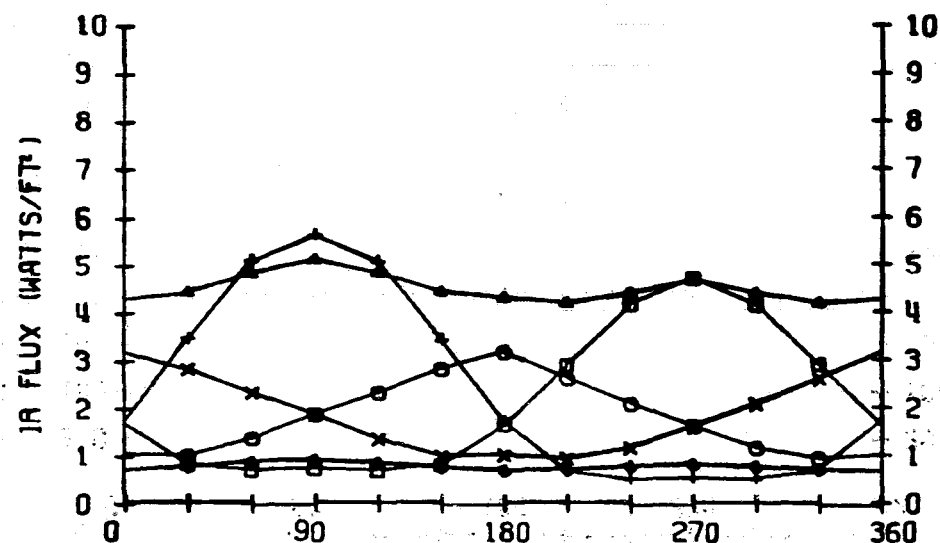


450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LCC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	36.6	31.3	25.5	47.9	37.3	58.3
K	+Y (○)	35.7	27.4	19.2	51.5	23.6	58.4
F	+Z (△)	0.7	0.5	0.3	9.0	4.3	18.5
L	-X (+)	37.2	32.1	28.2	46.6	25.4	50.4
U	-Y (X)	35.5	30.5	19.9	51.2	23.7	58.5
X	-Z (◇)	63.6	60.9	58.5	70.5	62.5	79.7

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

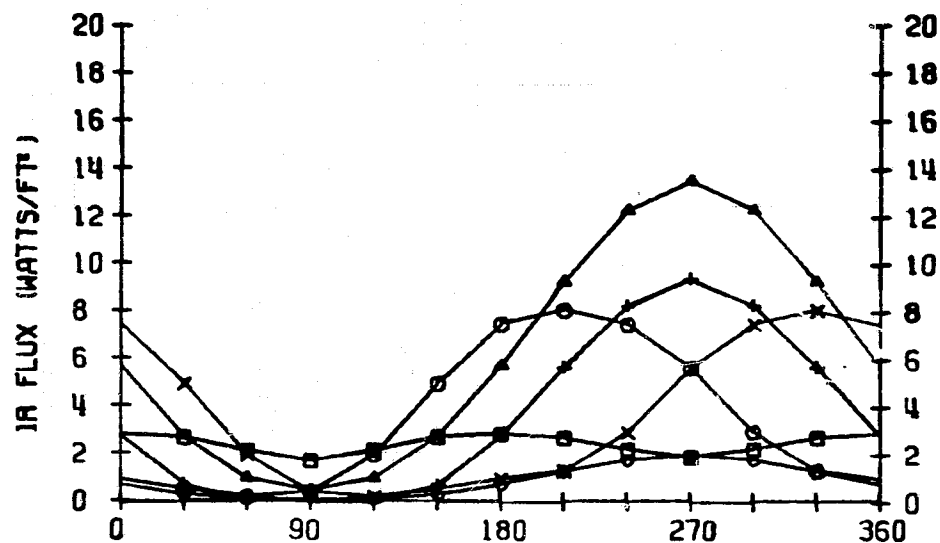
FOR

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

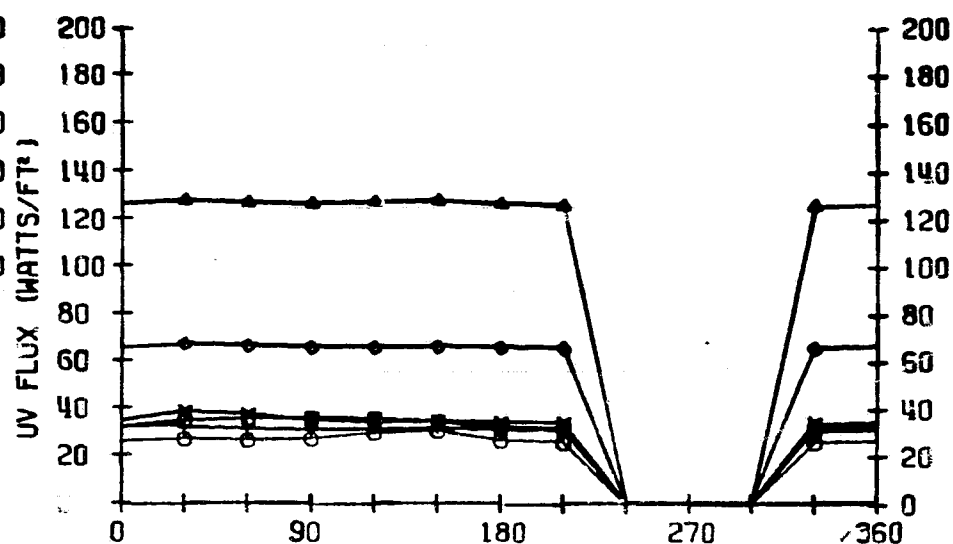
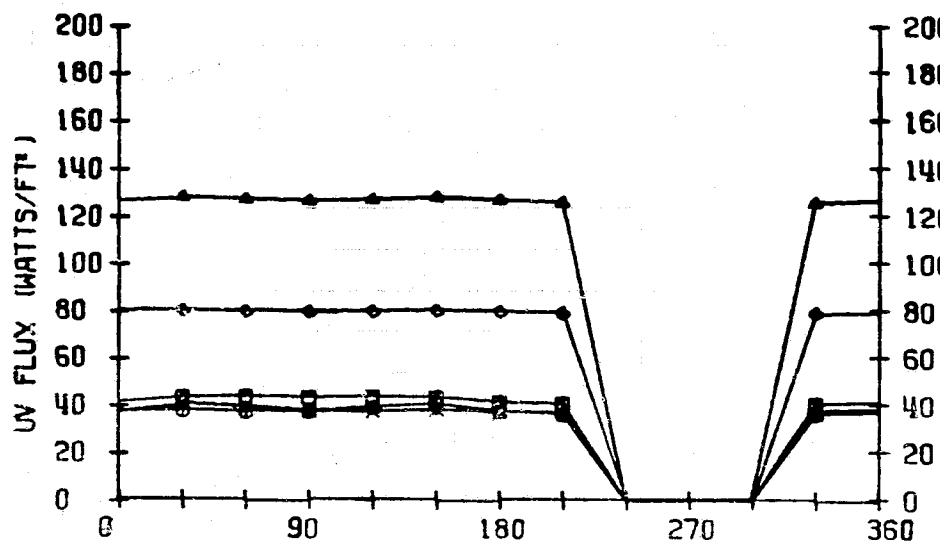
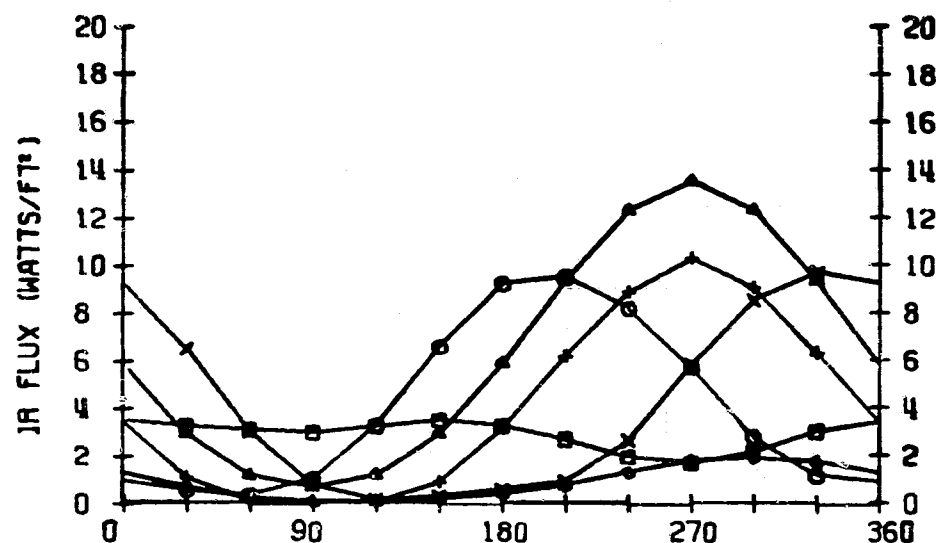
SURFACE DIRECTION		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.4	2.8	3.4	1.5	1.9	0.9
R	+Y (○)	3.5	4.1	5.2	2.0	4.9	1.7
F	+Z (△)	6.3	6.5	6.4	5.2	6.2	4.2
L	-X (+)	3.7	4.2	4.8	2.8	5.0	2.9
U	-Y (×)	3.5	4.0	5.2	2.0	4.9	1.7
X	-Z (◇)	0.8	0.8	1.0	0.9	0.9	0.8
U	+X (□)	28.1	22.6	19.9	38.6	14.1	37.3
V	+Y (○)	25.0	18.1	15.8	40.1	14.4	41.6
F	+Z (△)	84.5	84.4	84.4	88.8	85.1	91.7
L	-X (+)	25.3	21.3	20.7	35.0	20.0	38.7
U	-Y (×)	25.2	23.4	16.4	40.1	14.4	41.6
X	-Z (◇)	53.1	44.1	45.1	63.4	43.5	65.6

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

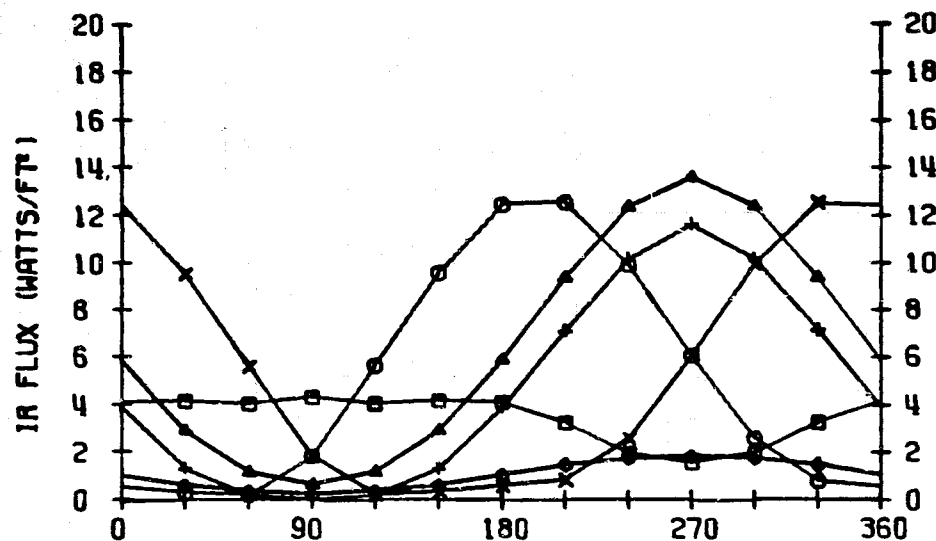


ORBIT POSITION (DEG)

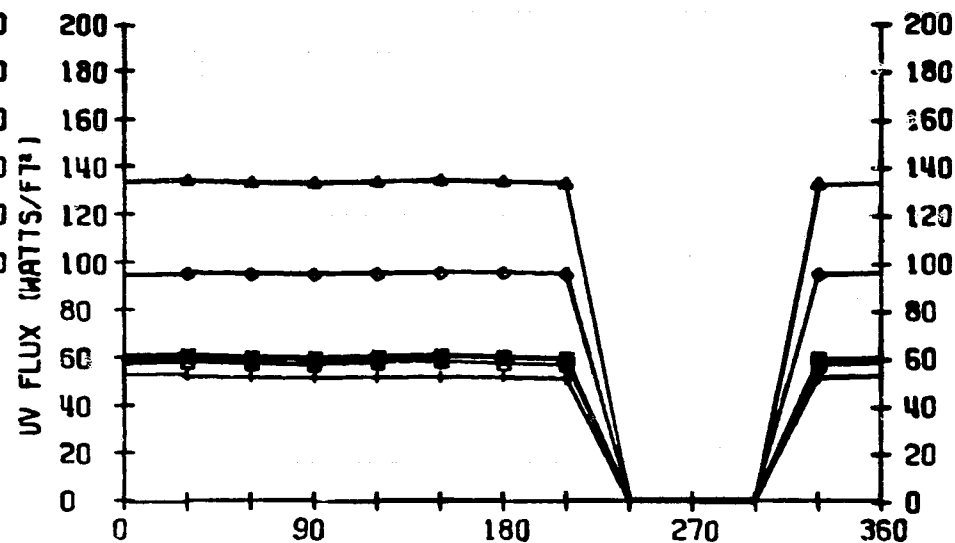
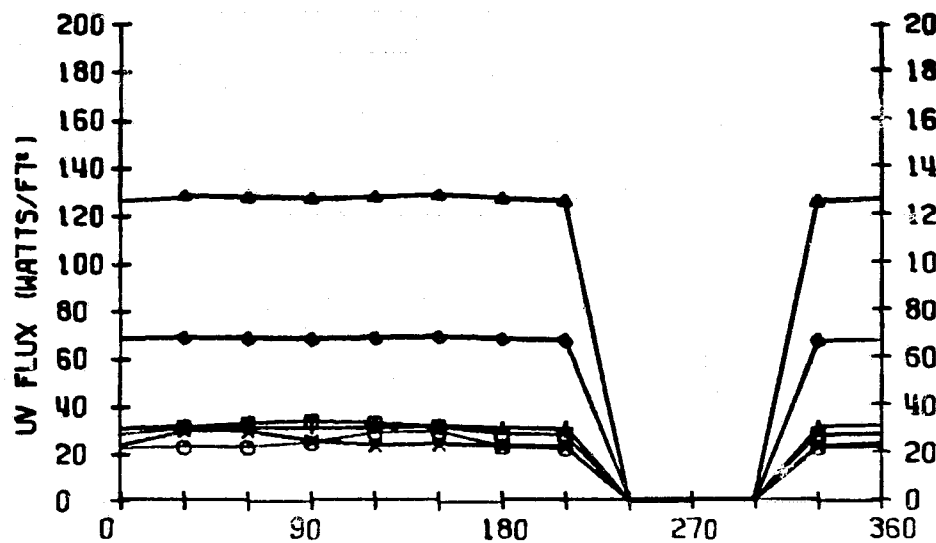
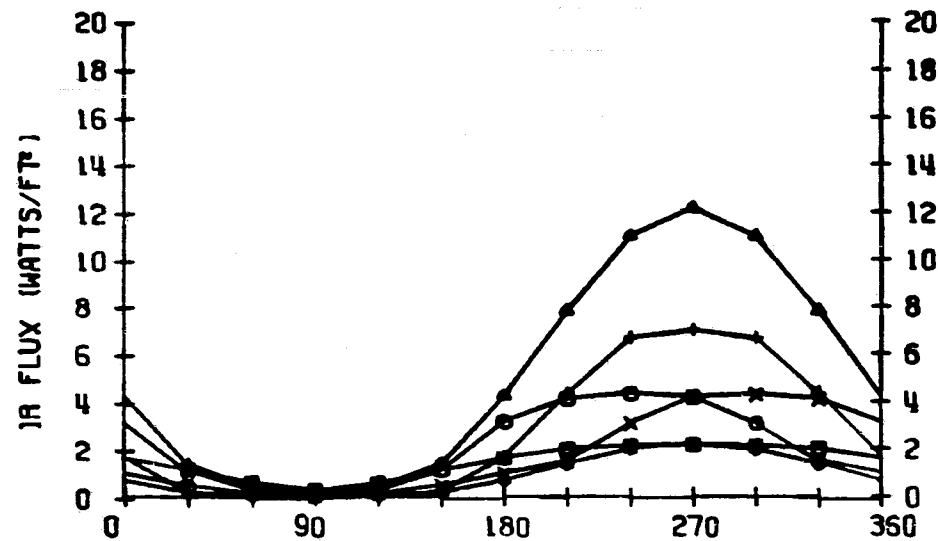
ORBIT POSITION (DEG)

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

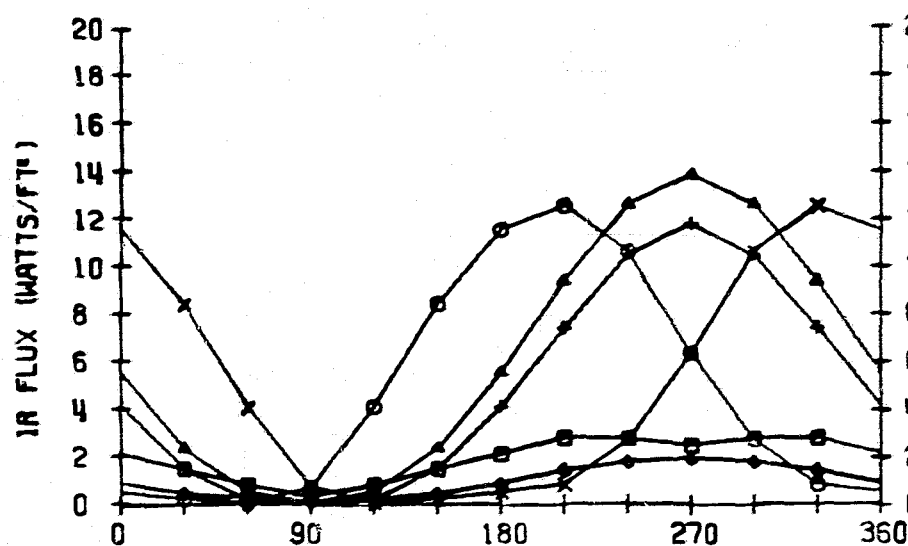


ORBIT POSITION (DEG)

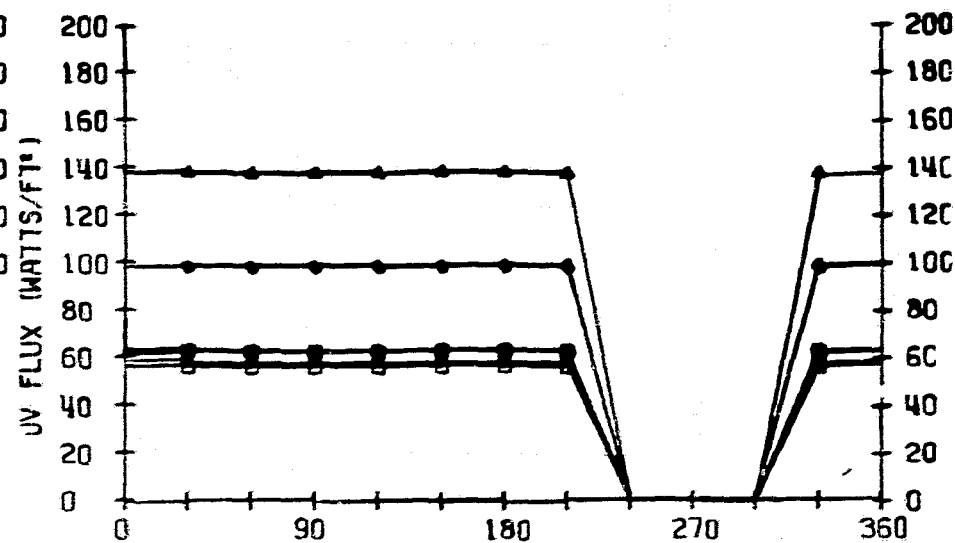
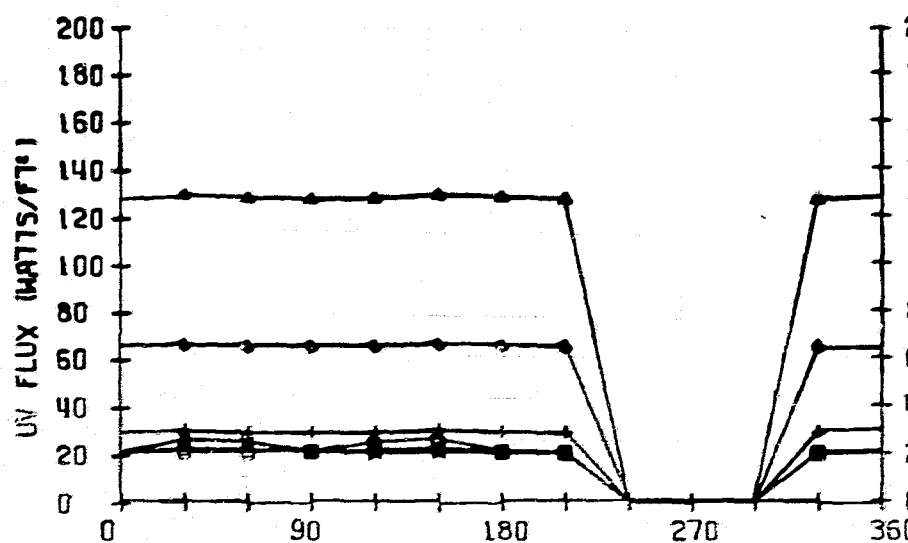
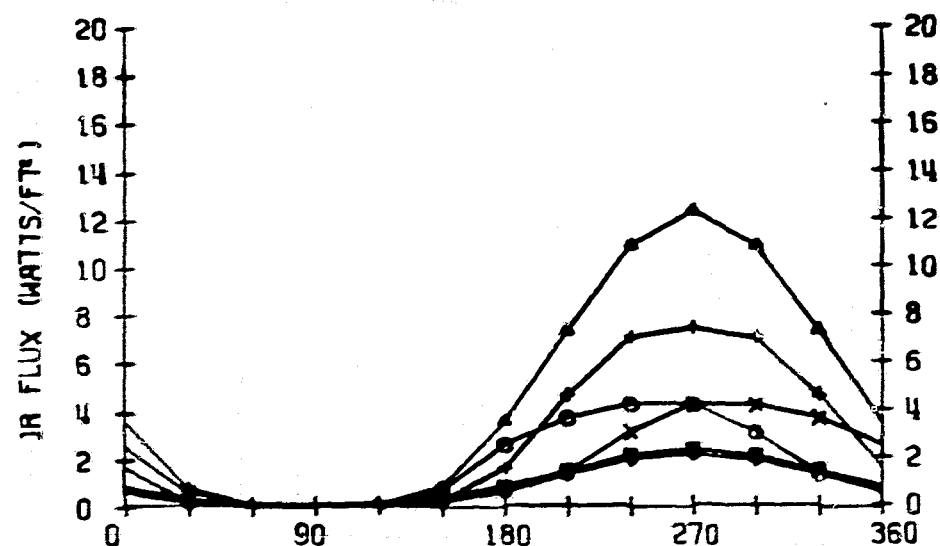
ORBIT POSITION (DEG)

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	28.3	24.2	19.8	36.9	29.3	45.4
R	+Y (○)	27.6	21.3	14.9	39.7	18.4	45.3
F	+Z (Δ)	0.6	0.4	0.2	7.0	3.4	14.5
L	-X (+)	28.6	24.8	21.8	35.8	19.7	39.0
U	-Y (X)	27.4	23.5	15.4	39.5	18.5	45.4
X	-Z (◇)	48.9	47.0	45.1	54.1	48.5	61.6

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 4

Bay 45° to sun, tail facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

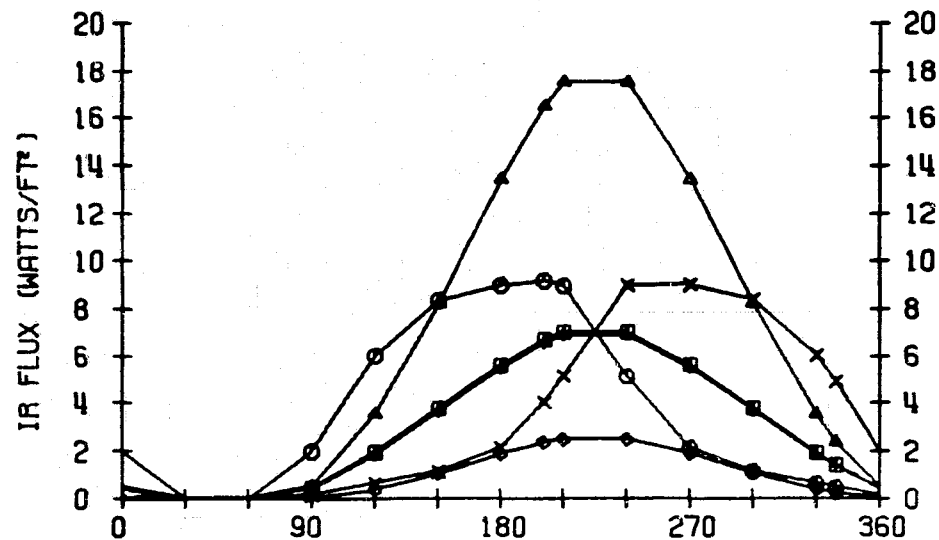
FOR

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

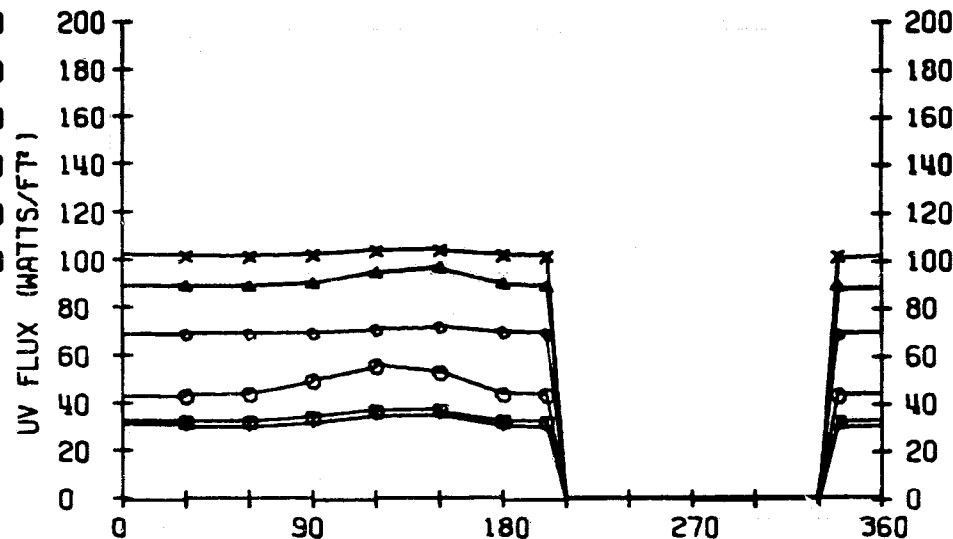
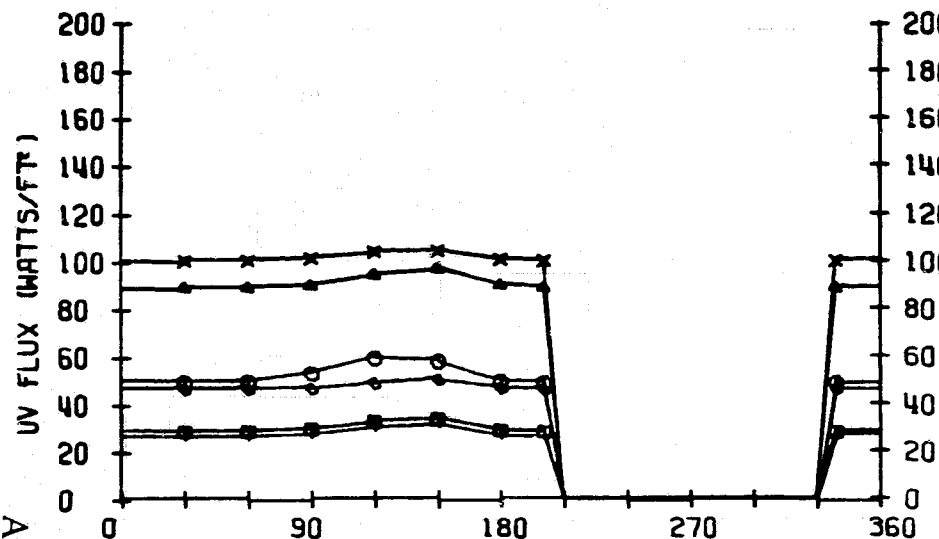
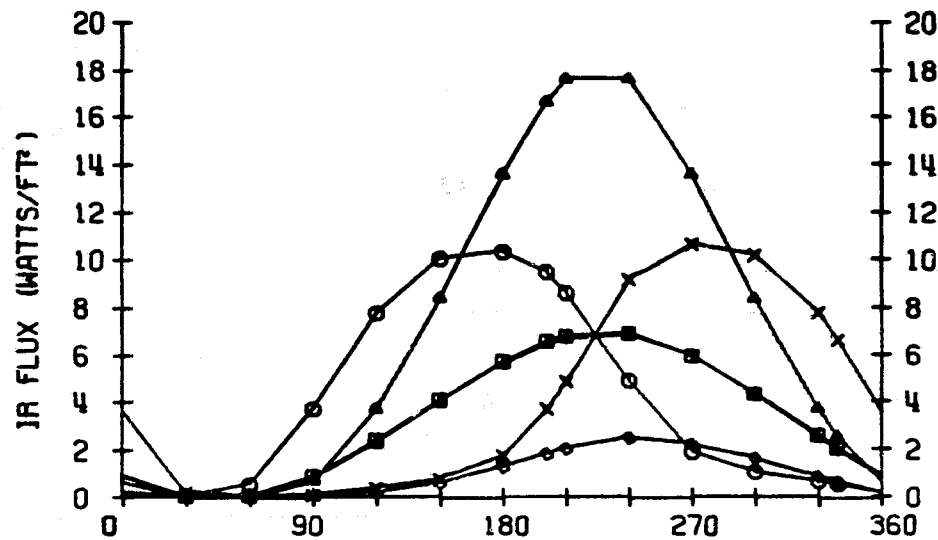
		LOC. 1	LOC. 2	LCC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.4	3.9	2.4	2.1	0.9
R	+Y (○)	3.6	4.1	5.2	2.2	4.8	1.7
F	+Z (Δ)	7.2	7.3	7.3	6.2	6.8	4.9
L	-X (+)	3.1	3.4	3.7	2.4	3.9	2.3
U	-Y (x)	3.6	4.1	5.2	2.2	4.8	1.7
X	-Z (◇)	1.0	1.0	1.1	1.1	0.9	0.8
U	+X (□)	18.5	20.9	13.5	22.1	10.3	20.9
V	+Y (○)	32.3	29.2	21.8	37.5	19.7	37.5
F	+Z (Δ)	56.0	55.8	55.8	60.4	56.5	62.0
L	-X (+)	17.5	20.0	15.0	20.9	14.6	22.2
U	-Y (x)	62.6	63.1	59.8	68.2	59.7	68.9
X	-Z (◇)	29.0	42.7	28.8	28.2	27.7	29.3

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1



LOCATION 2

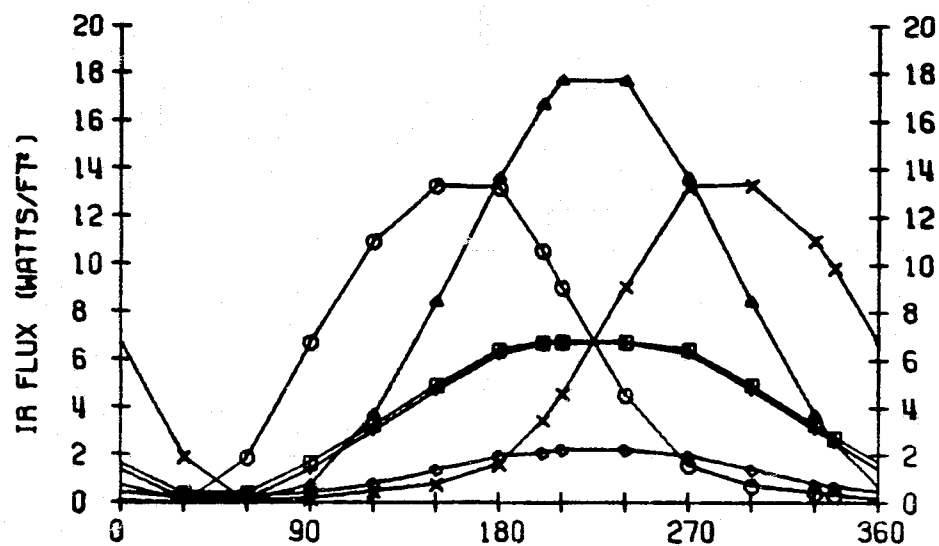


ORBIT POSITION (DEG)

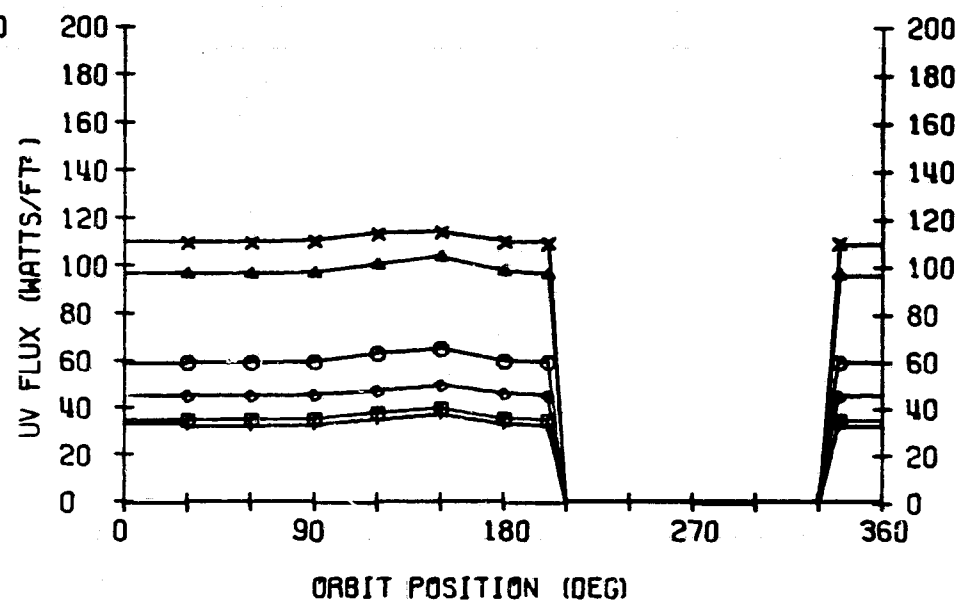
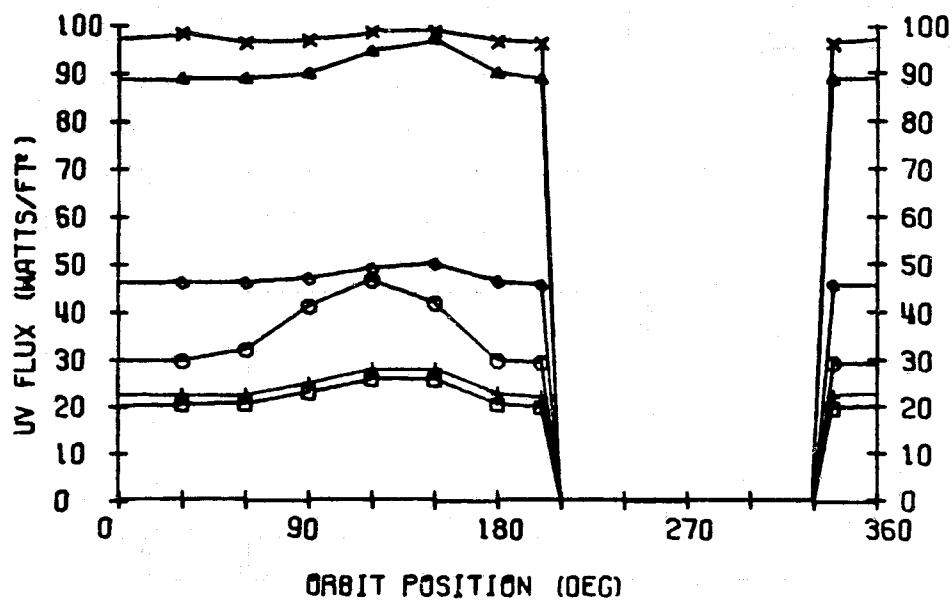
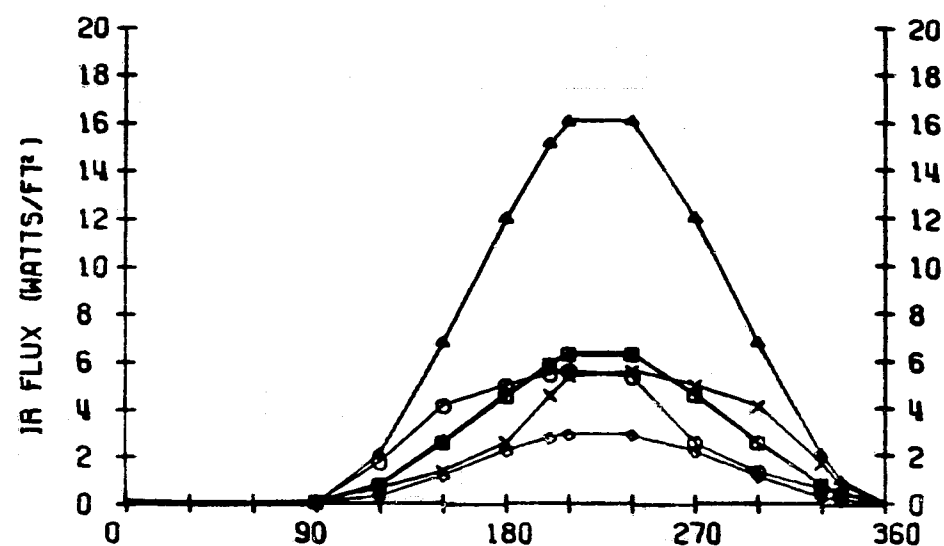
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3

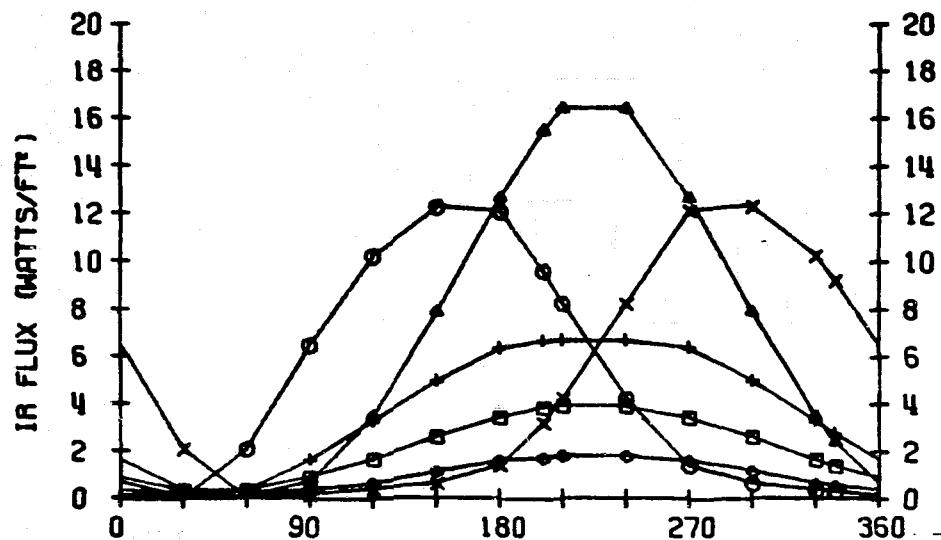


LOCATION 4

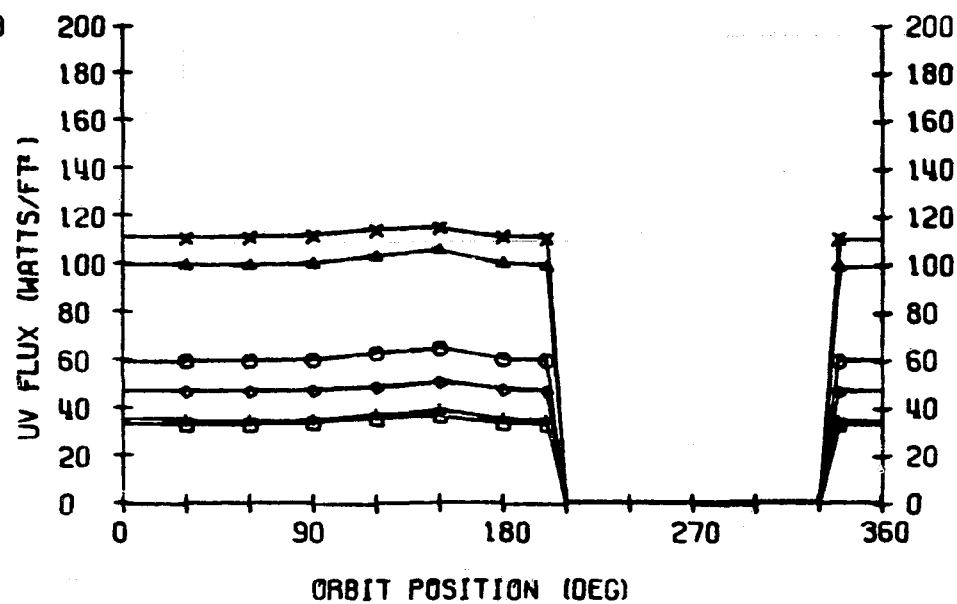
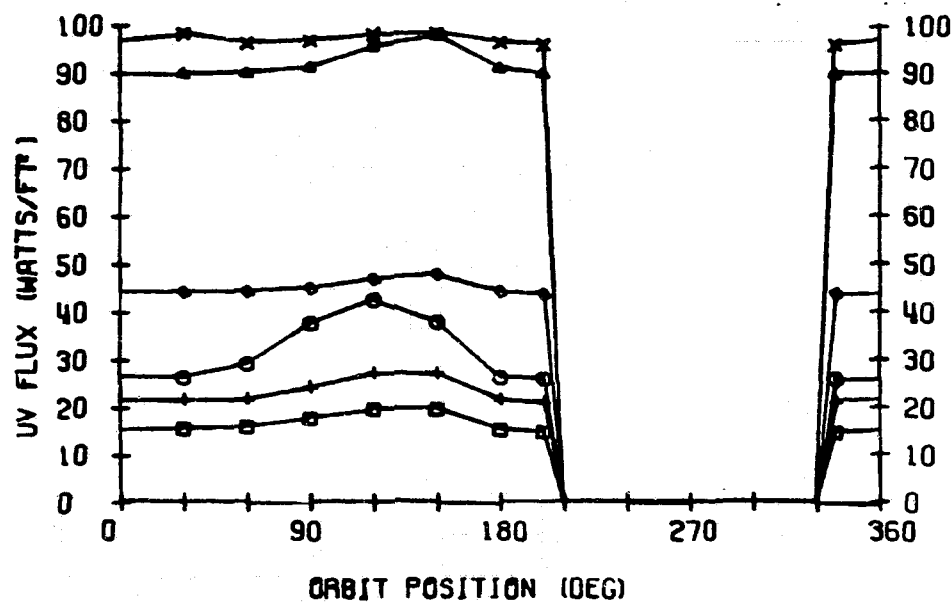
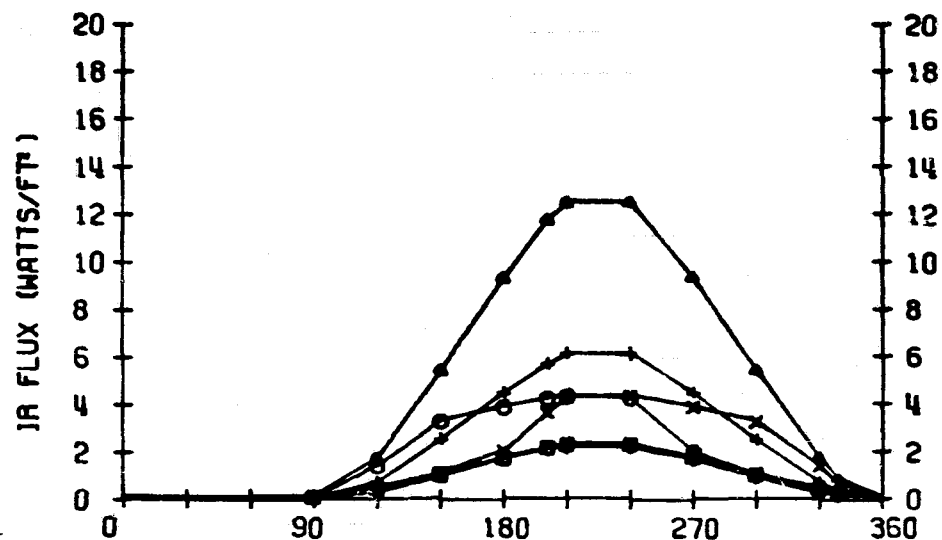


450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (■)	19.5	19.4	13.8	23.9	20.2	28.8
R	+Y (●)	25.2	21.5	13.7	31.7	15.6	34.3
F	+Z (△)	0.4	0.3	0.2	5.7	2.3	10.6
L	-X (⊕)	19.9	19.6	15.3	23.5	13.7	24.5
U	-Y (⊗)	16.4	13.9	9.5	22.6	11.3	25.1
X	-Z (◇)	31.1	38.4	30.9	31.1	32.2	34.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

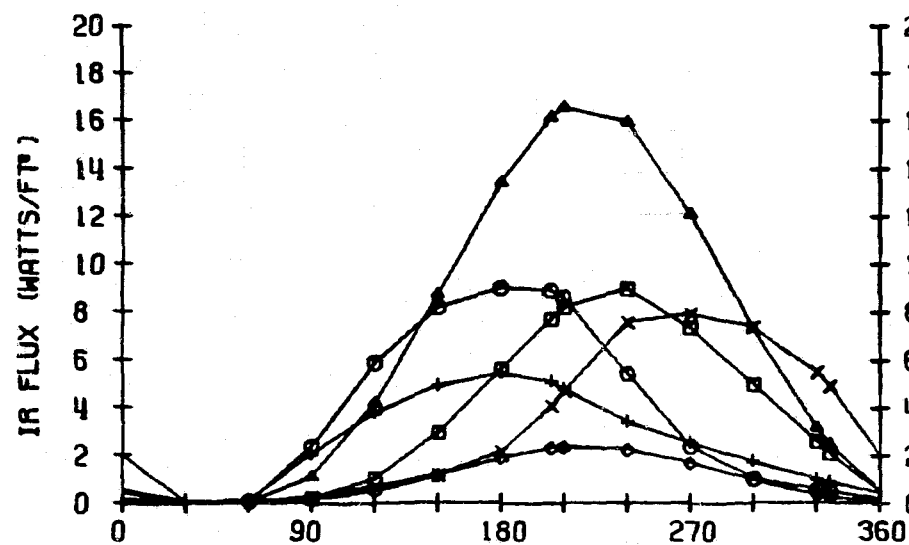
FOR

450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

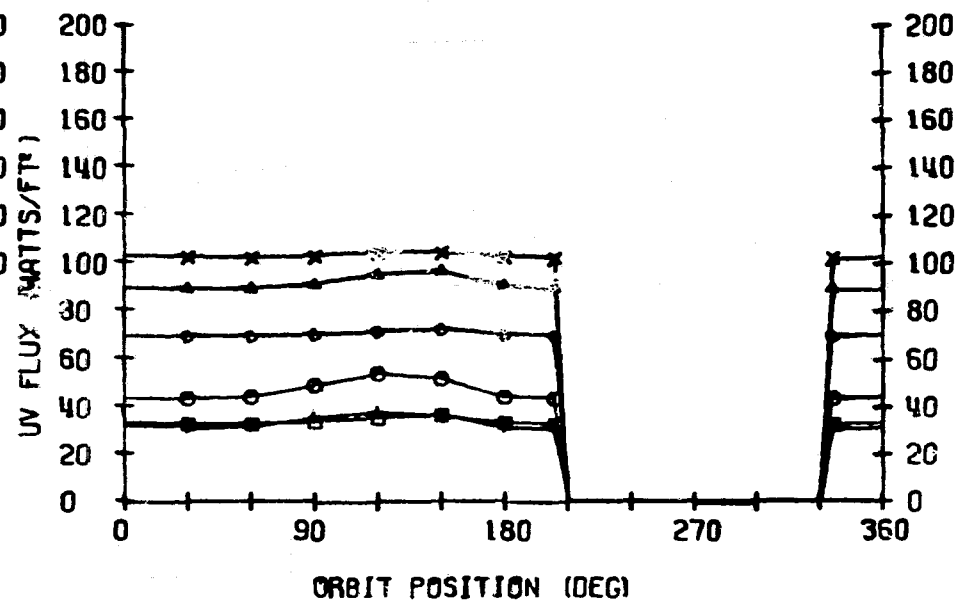
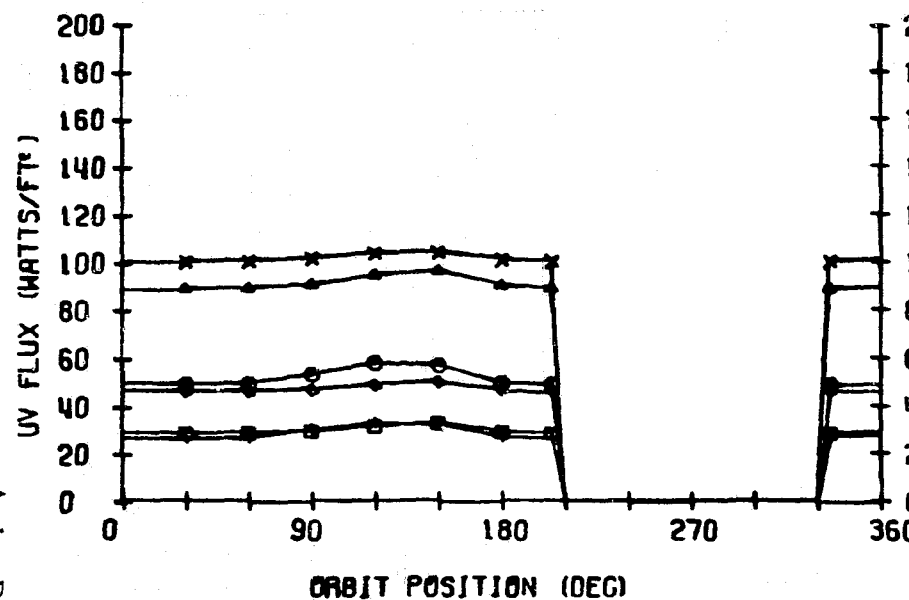
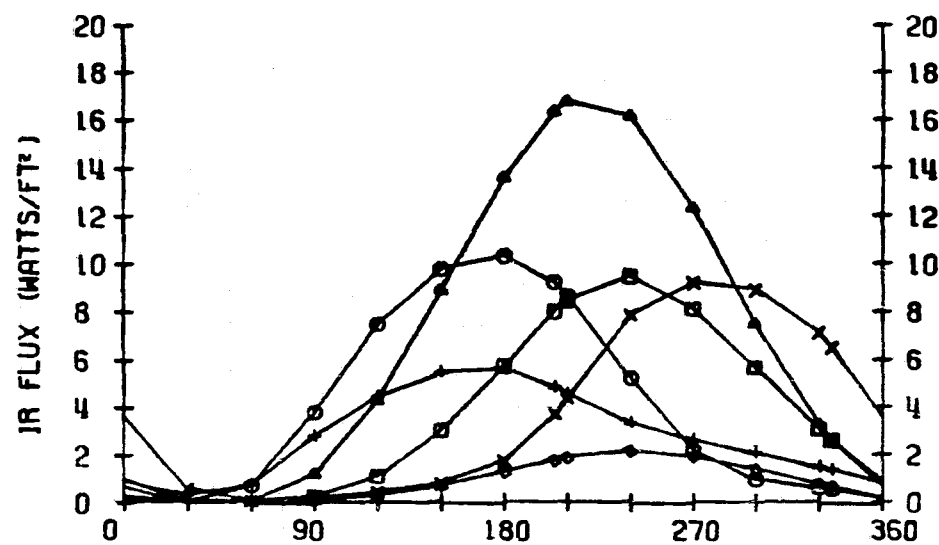
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.5	3.8	4.4	2.6	2.1	0.9
R	+Y (○)	3.6	4.2	5.2	2.2	4.9	1.7
F	+Z (Δ)	6.9	7.1	7.0	5.8	6.4	4.4
L	-X (+)	2.6	2.9	3.4	2.0	3.5	2.0
U	-Y (x)	3.3	3.7	4.8	2.0	4.3	1.5
X	-Z (◇)	0.9	0.9	1.1	1.0	0.9	0.7
U	+X (□)	18.8	21.2	13.4	22.7	10.9	21.8
V	+Y (○)	33.1	29.6	21.7	38.6	19.9	38.9
F	+Z (Δ)	57.6	57.5	57.5	62.2	58.3	64.2
L	-X (+)	18.5	21.2	16.2	21.8	15.8	23.4
U	-Y (x)	64.4	64.9	61.6	70.2	61.7	71.1
X	-Z (◇)	29.9	44.0	29.7	29.1	28.7	30.4

450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1

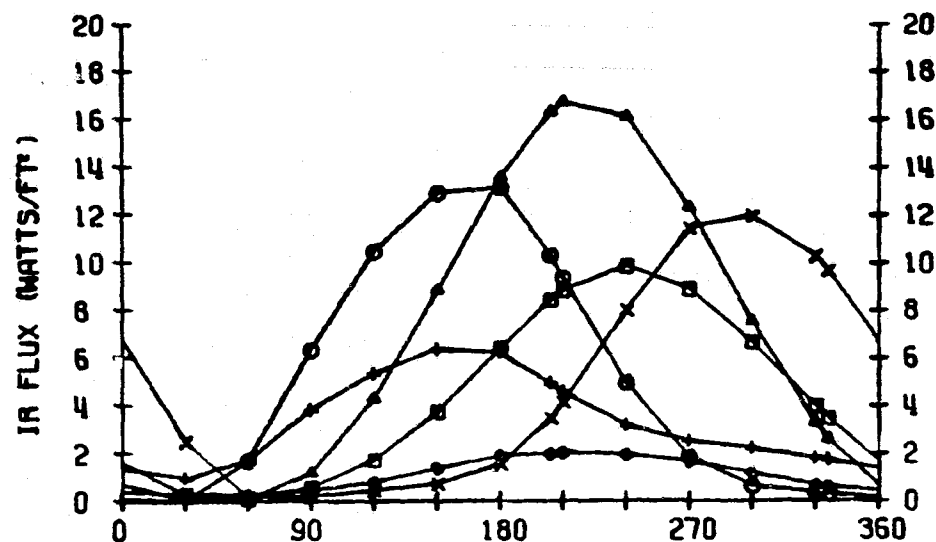


LOCATION 2

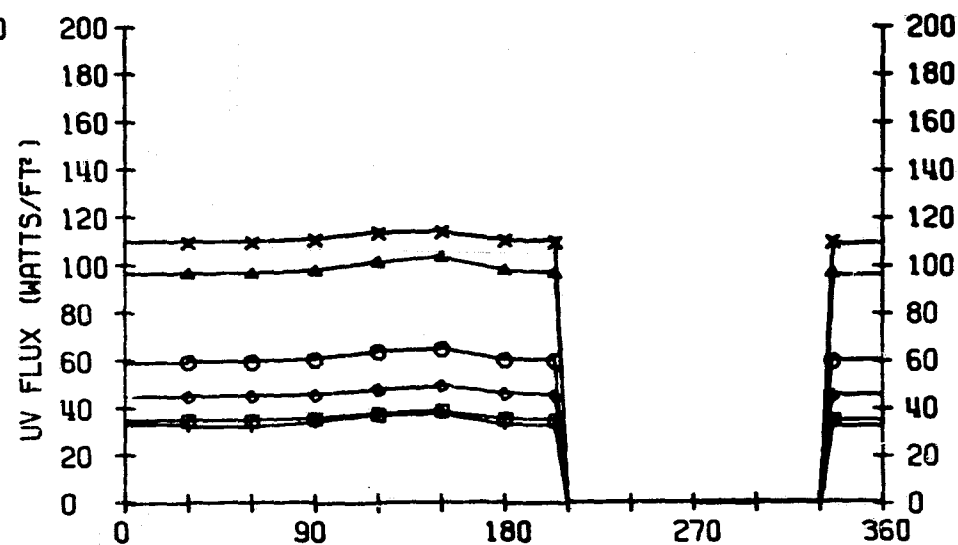
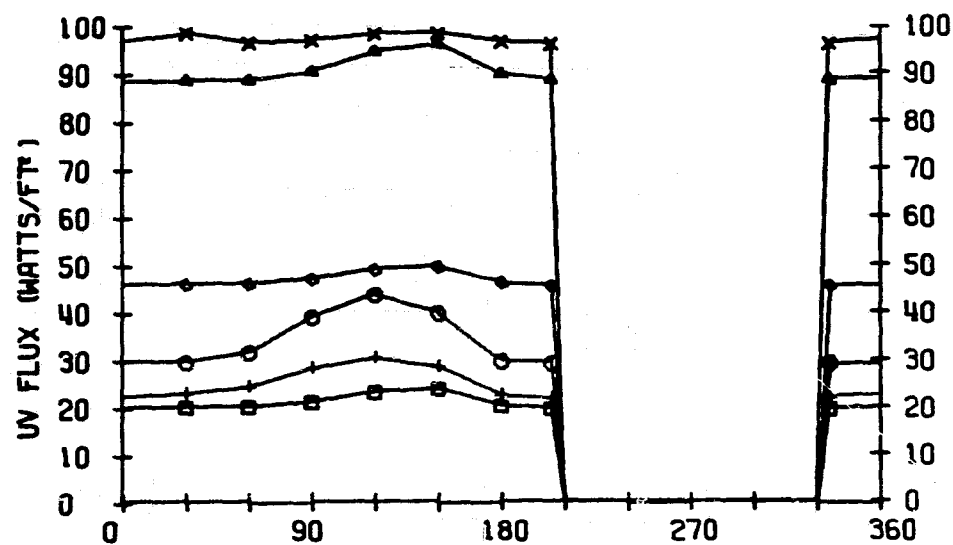
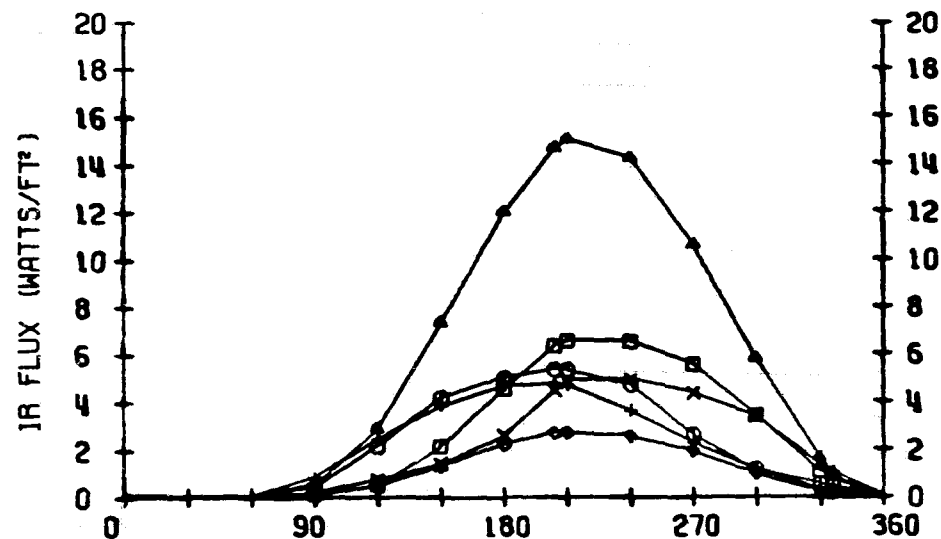


450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3



LOCATION 4

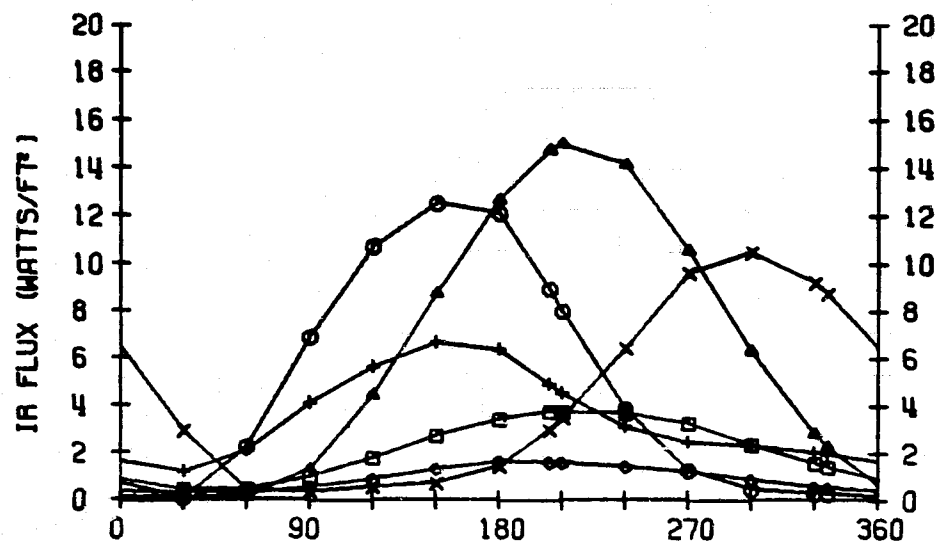


ORBIT POSITION (DEG)

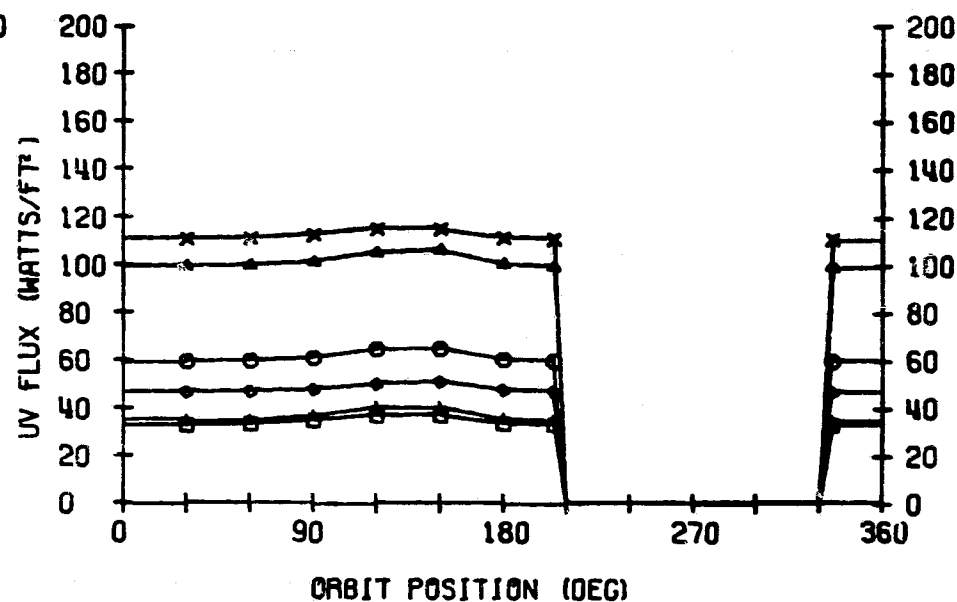
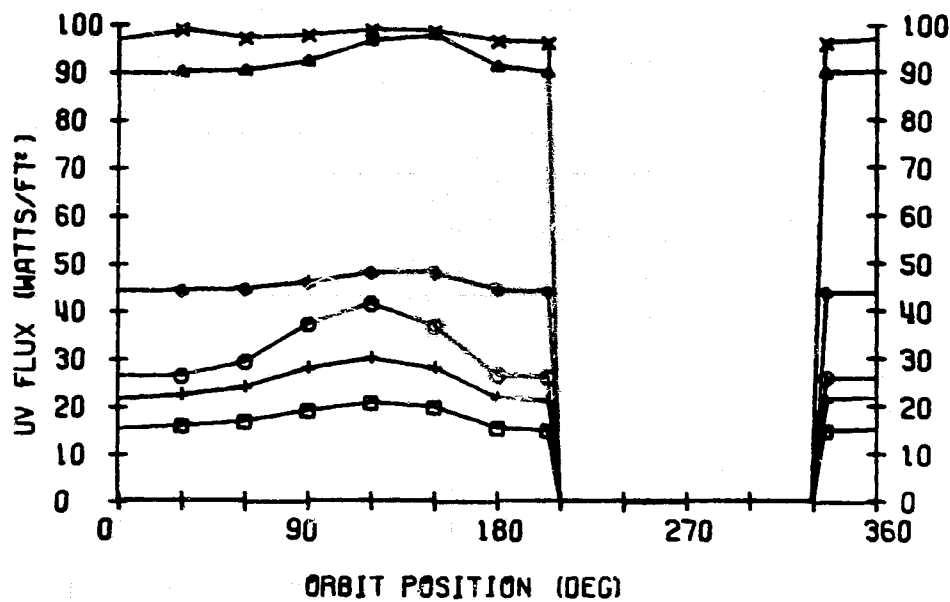
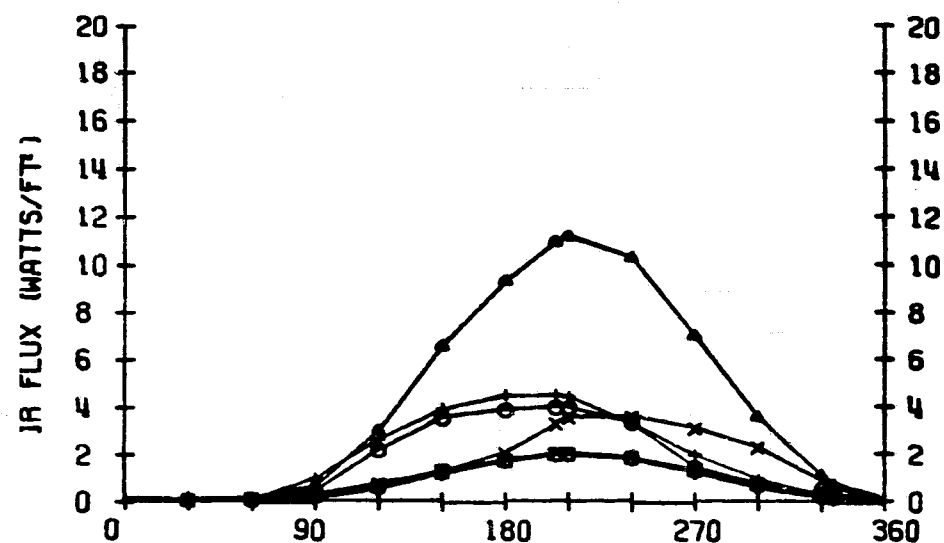
ORBIT POSITION (DEG)

450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=30 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	19.6	19.5	13.9	24.0	20.4	28.9
R	+Y (○)	25.2	21.6	13.7	31.8	15.6	34.3
F	+Z (△)	0.4	0.3	0.2	5.7	2.4	10.7
L	-X (+)	20.0	19.7	15.4	23.6	13.7	24.6
U	-Y (X)	16.5	14.0	9.6	22.7	11.4	25.3
X	-Z (◇)	31.2	38.5	31.0	31.2	32.3	34.5

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

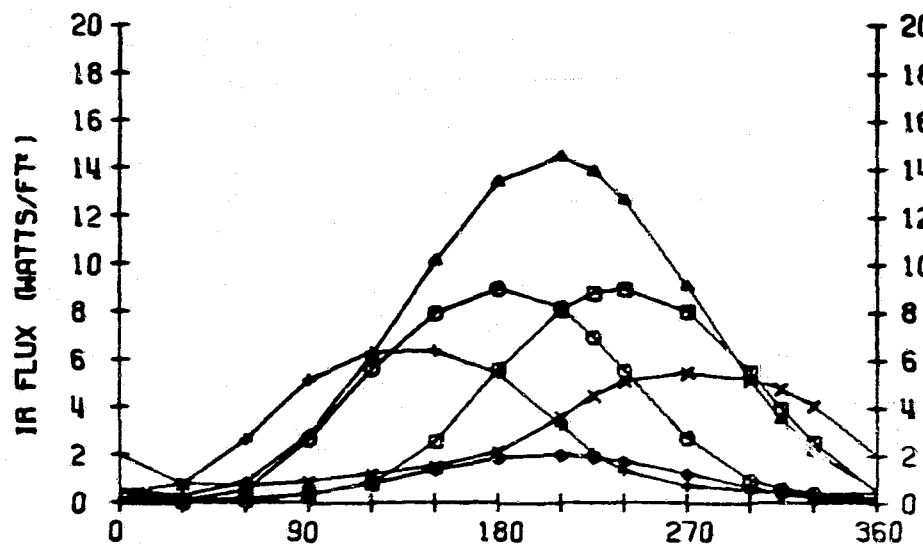
FOR

450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

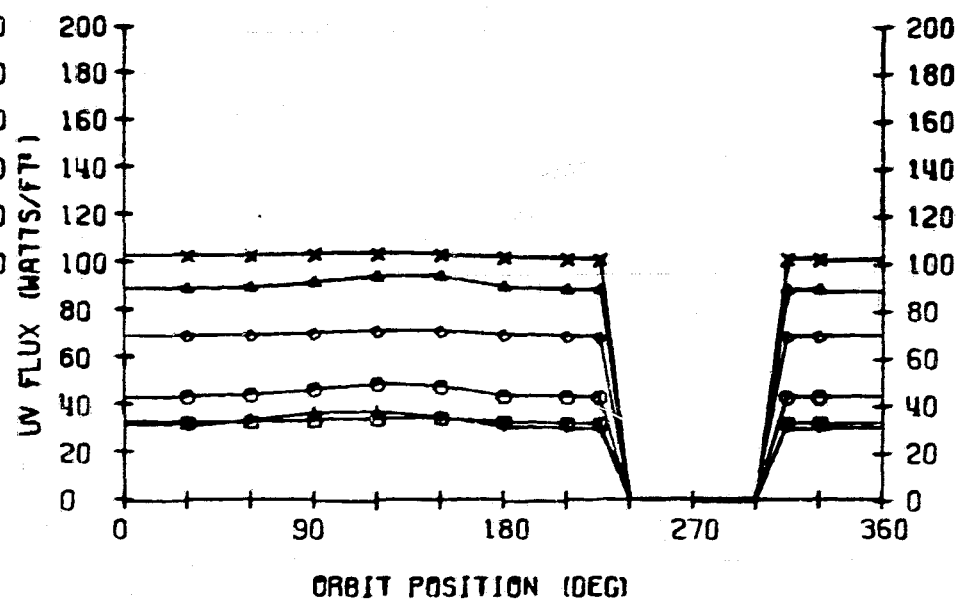
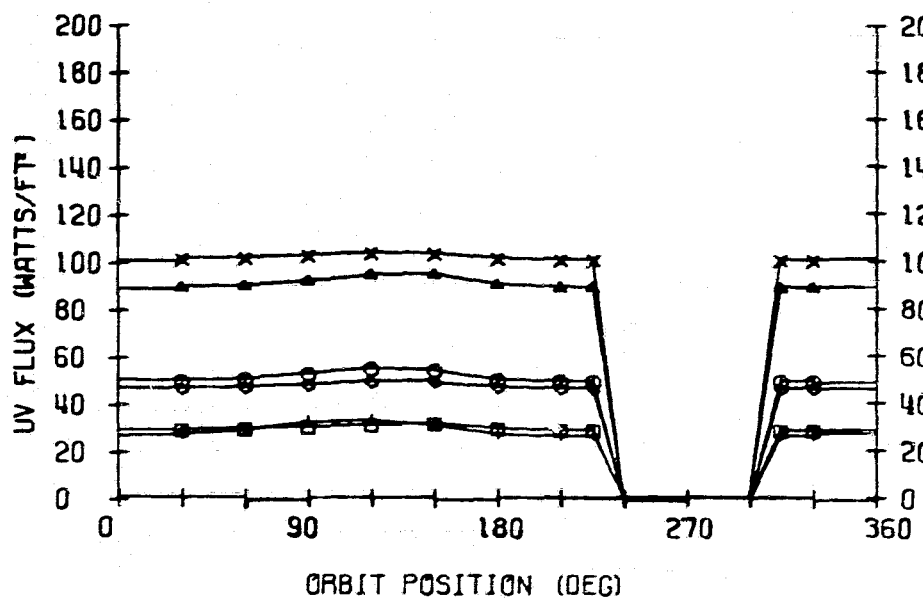
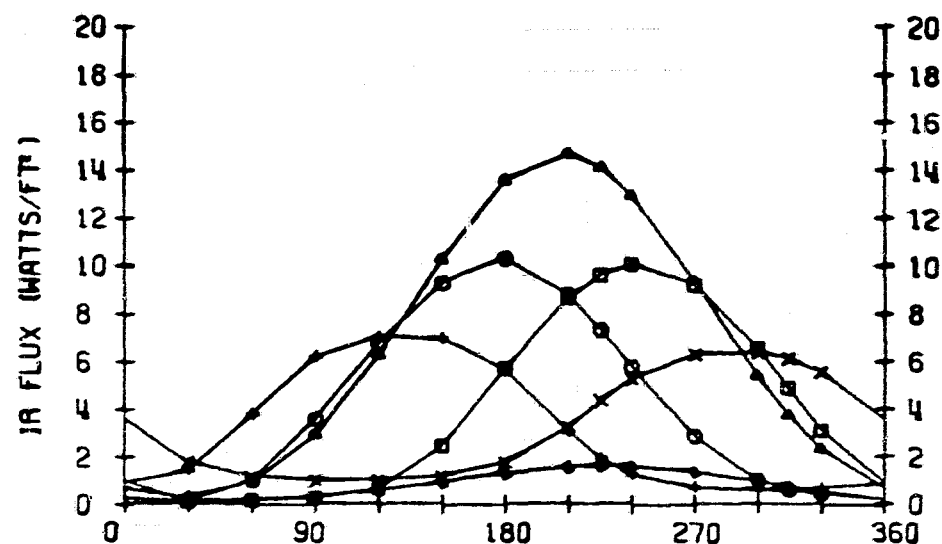
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.6	4.0	4.6	2.5	2.1	0.9
R	+Y (○)	3.7	4.2	5.1	2.1	4.7	1.6
F	+Z (Δ)	6.5	6.6	6.6	5.5	5.9	4.0
L	-X (†)	2.8	3.2	3.9	2.2	4.0	2.2
U	-Y (×)	2.7	3.2	4.3	1.7	3.8	1.2
X	-Z (◇)	0.9	0.8	1.0	1.0	0.8	0.7
U	+X (□)	22.0	24.9	15.4	26.8	12.6	25.9
V	+Y (○)	38.4	34.0	23.7	45.7	21.6	46.1
F	+Z (Δ)	68.2	68.0	68.0	73.8	69.0	76.2
L	-X (†)	22.0	25.2	19.1	26.0	18.5	27.9
U	-Y (×)	76.4	77.3	73.3	83.2	73.4	84.4
X	-Z (◇)	35.5	52.3	35.0	34.6	34.0	36.2

450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1

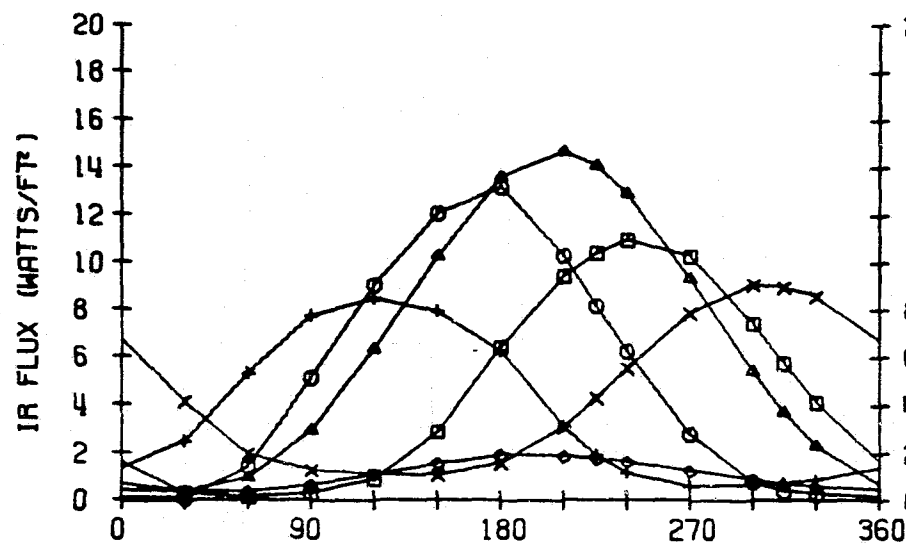


LOCATION 2

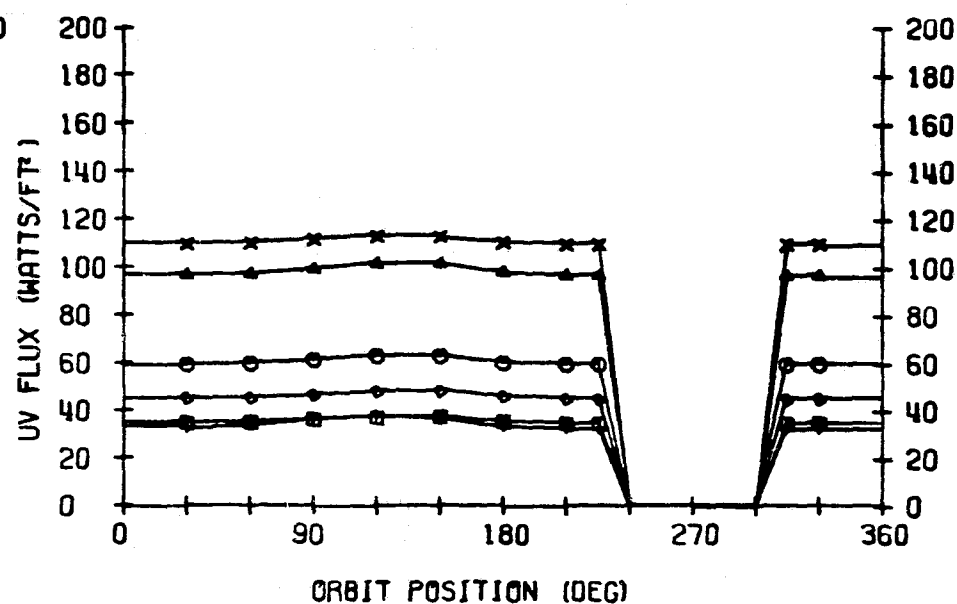
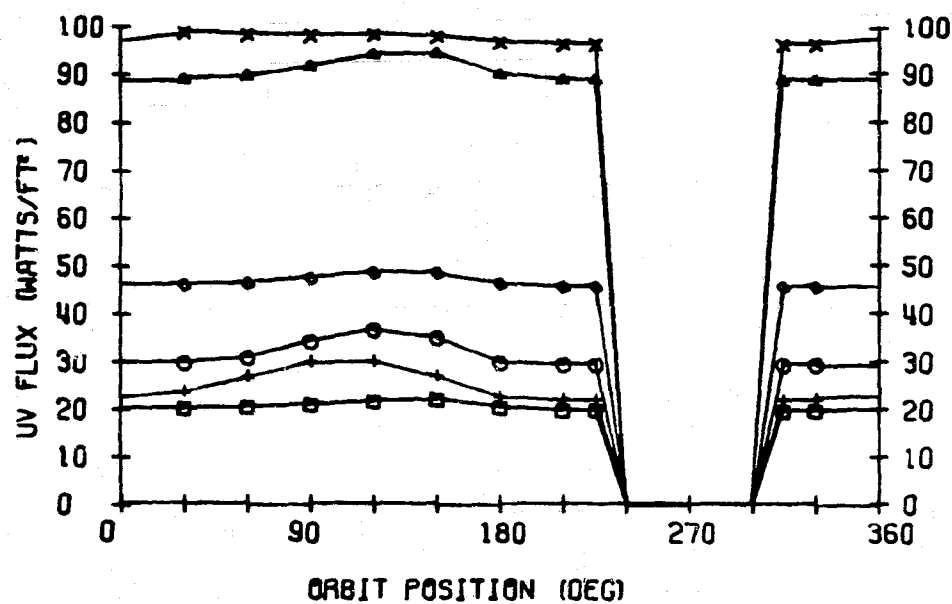
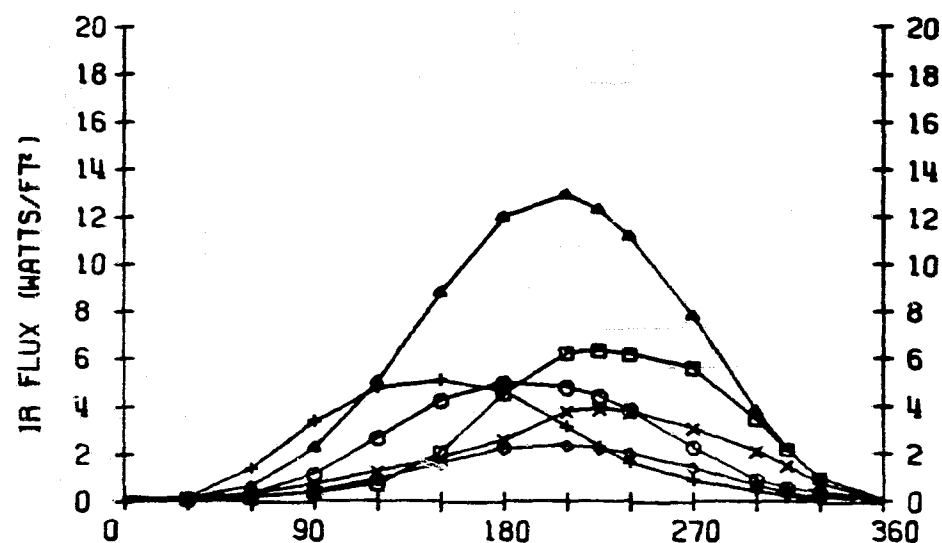


450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3



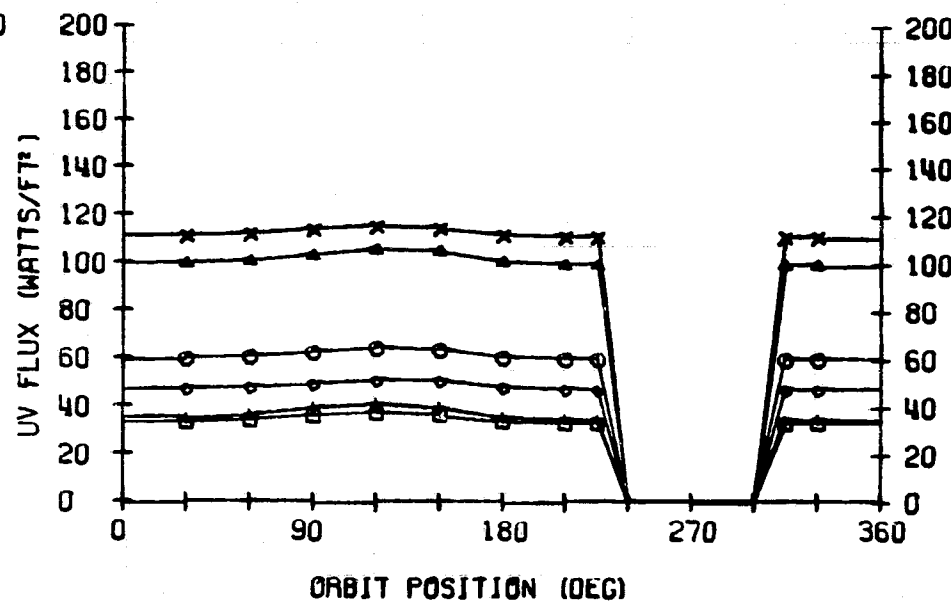
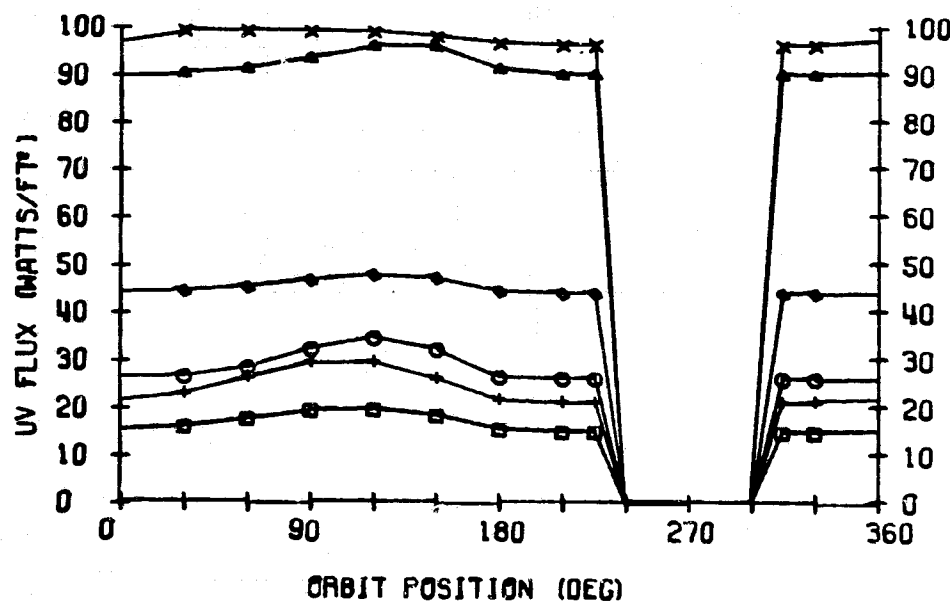
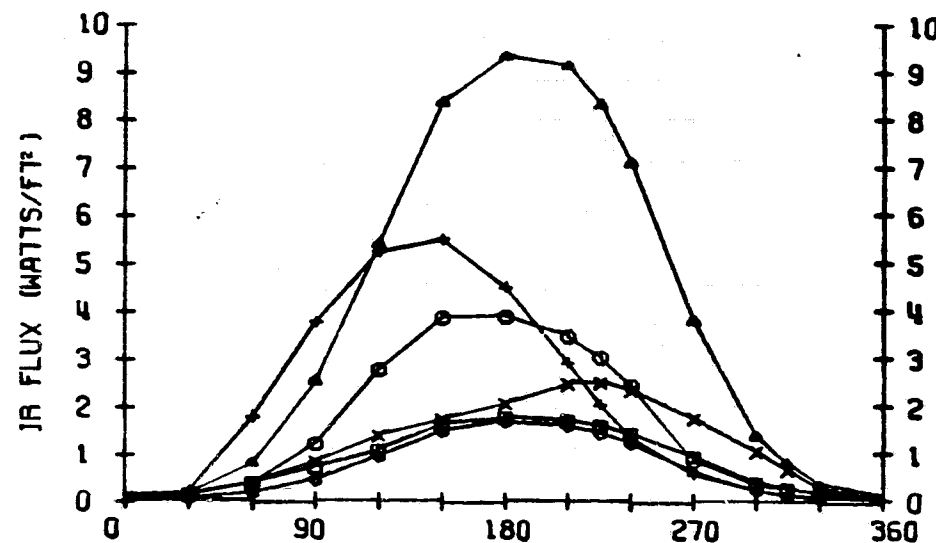
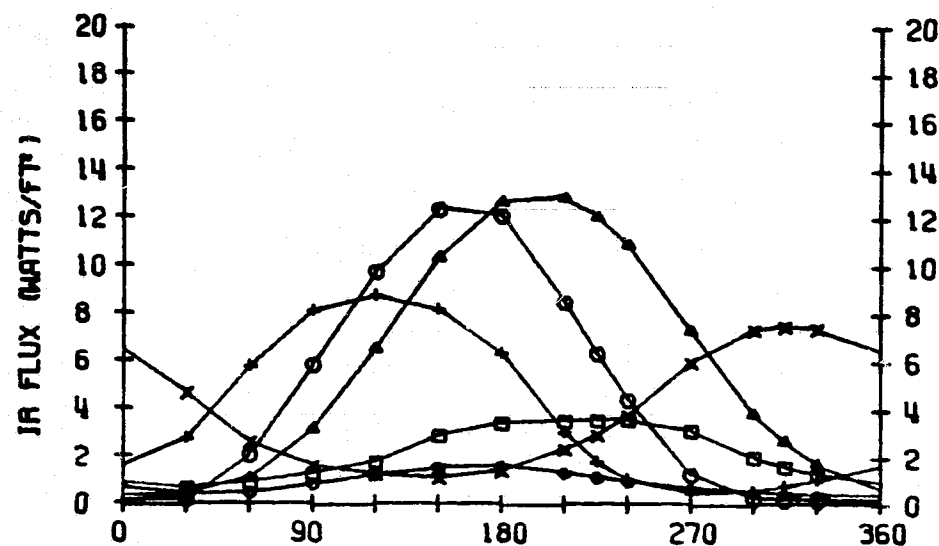
LOCATION 4



450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5

LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=60 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	23.0	23.0	16.3	28.1	24.1	34.2
R	+Y (○)	29.9	25.5	16.2	37.5	18.6	40.8
F	+Z (△)	0.5	0.3	0.2	6.7	2.8	12.6
L	-X (+)	23.5	23.1	18.1	27.7	16.1	29.0
U	-Y (X)	19.1	16.3	11.1	26.3	13.3	29.7
X	-Z (◇)	36.6	45.4	36.3	36.4	38.1	40.8

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

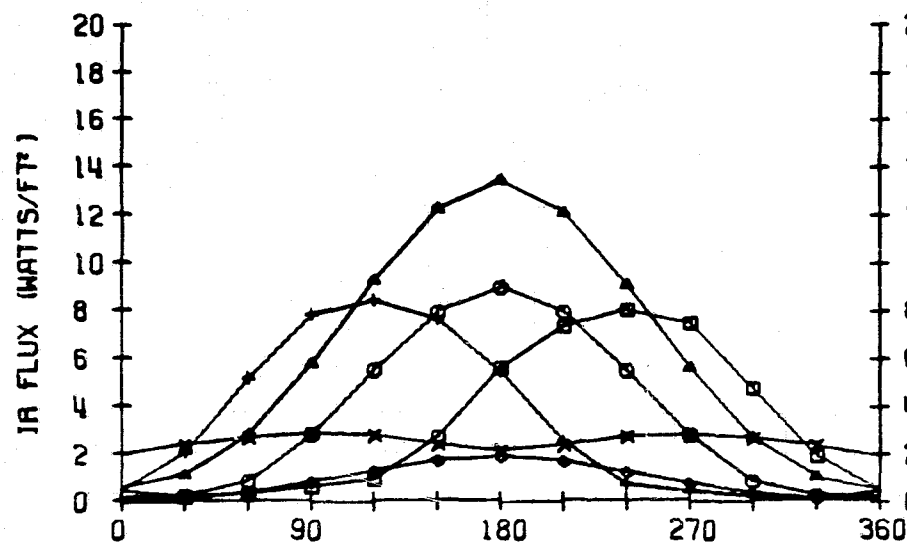
FOR

450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

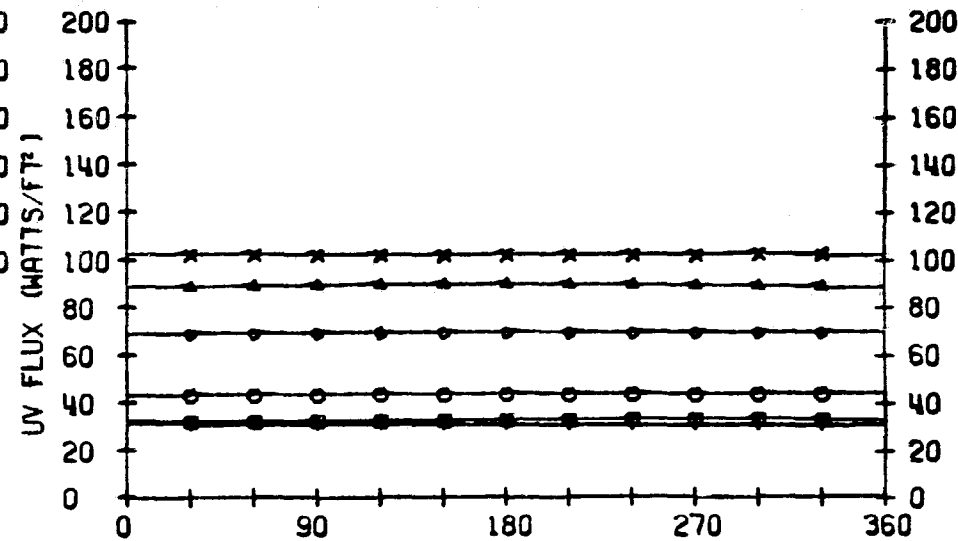
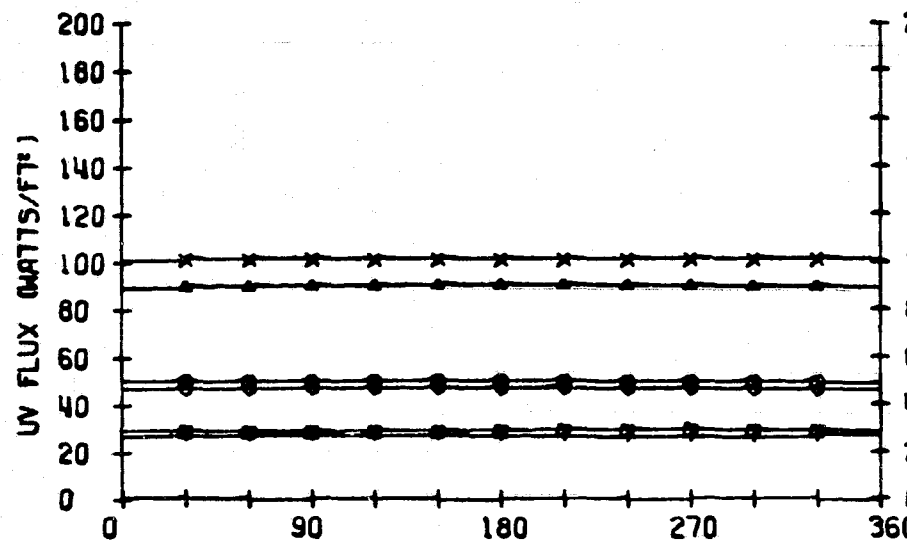
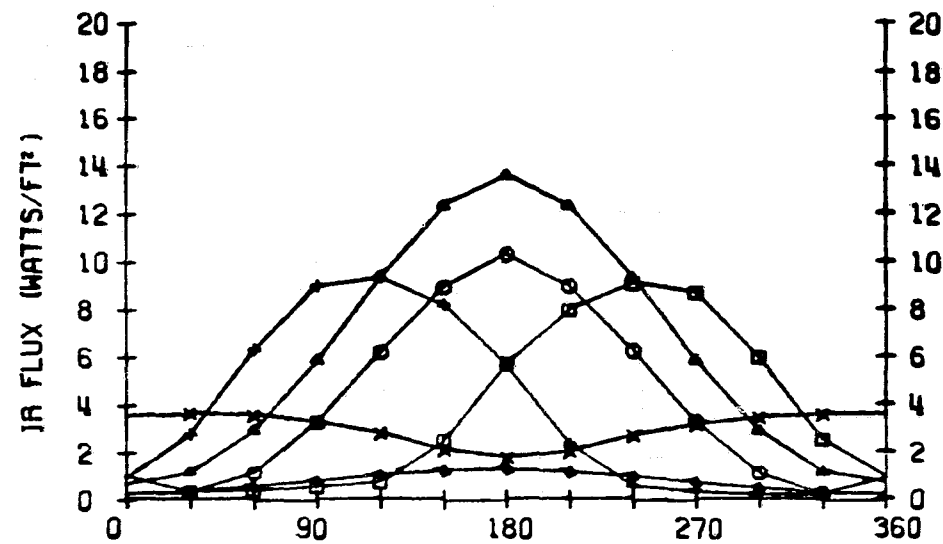
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.4	3.8	4.4	2.4	2.0	0.8
R	+Y (○)	3.6	4.2	5.1	2.1	4.7	1.7
F	+Z (△)	6.3	6.4	6.4	5.4	5.8	4.1
L	-X (+)	3.4	3.9	4.5	2.7	4.7	2.7
U	-Y (×)	2.5	3.0	4.1	1.6	3.6	1.1
X	-Z (◇)	0.8	0.7	1.0	1.0	0.8	0.7
U	+X (□)	28.9	32.8	20.2	35.1	15.2	33.3
V	+Y (○)	49.8	43.7	29.7	60.0	26.3	60.1
F	+Z (△)	89.6	89.3	89.3	97.1	90.4	99.8
L	-X (+)	27.4	31.4	22.8	33.2	21.9	35.4
U	-Y (×)	101.0	102.3	96.8	109.9	96.6	111.2
X	-Z (◇)	46.5	69.2	45.9	45.3	44.1	47.1

450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1

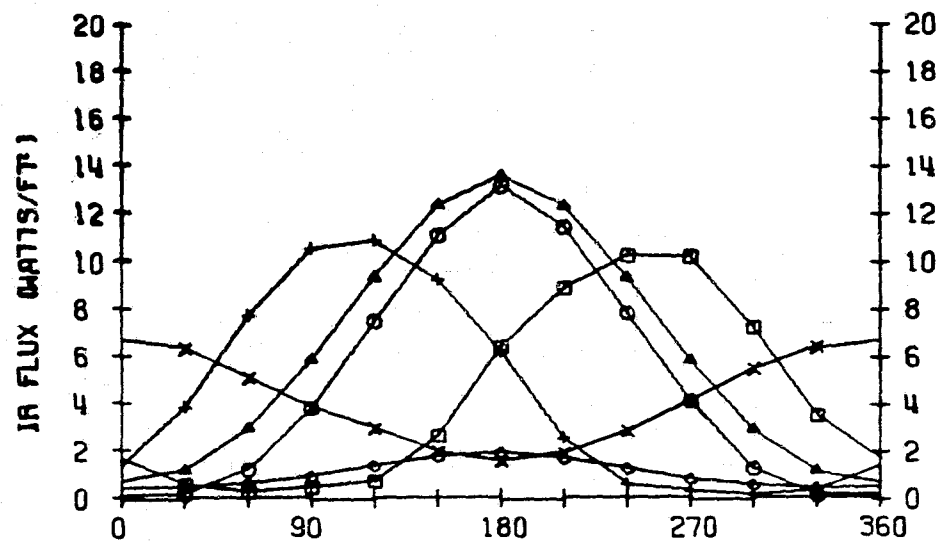


LOCATION 2

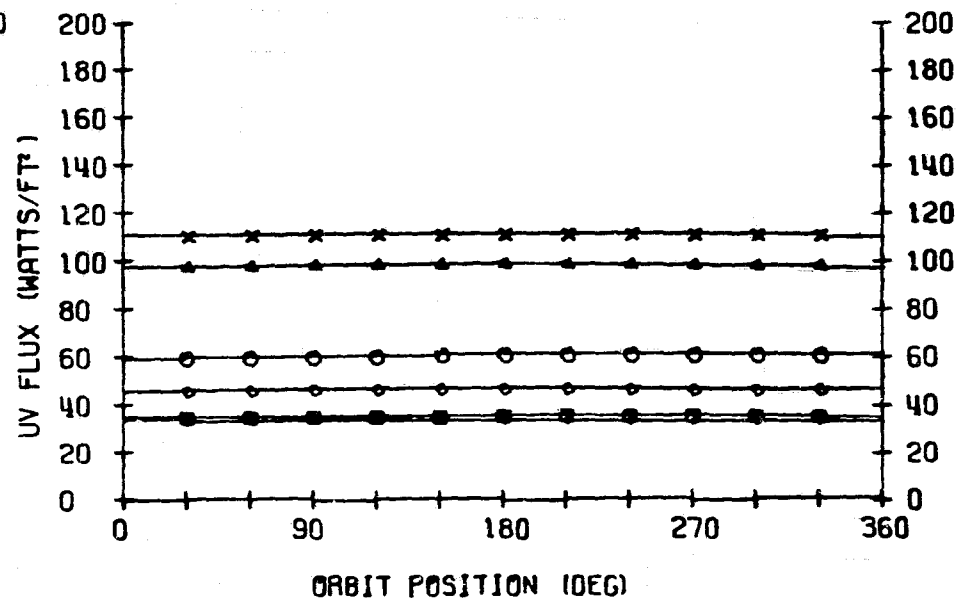
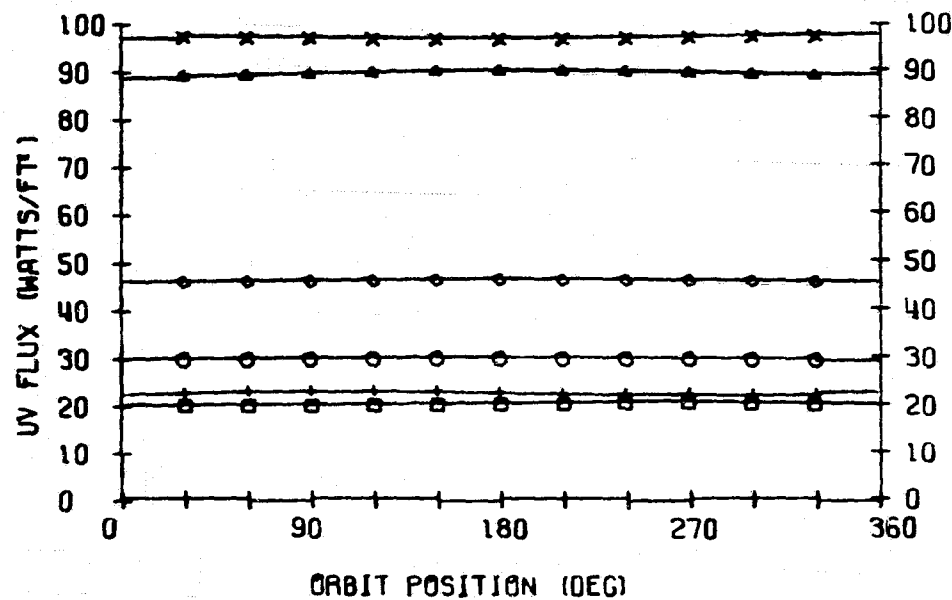
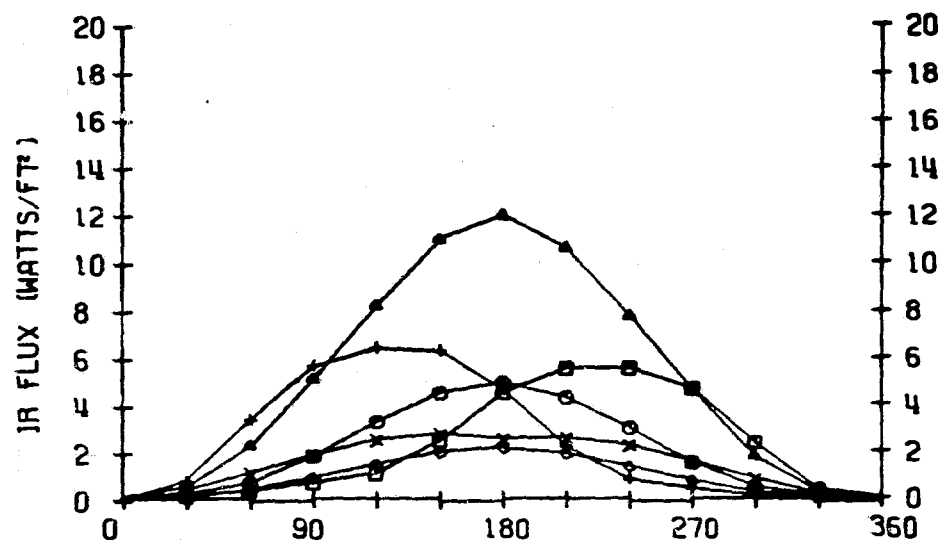


450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3



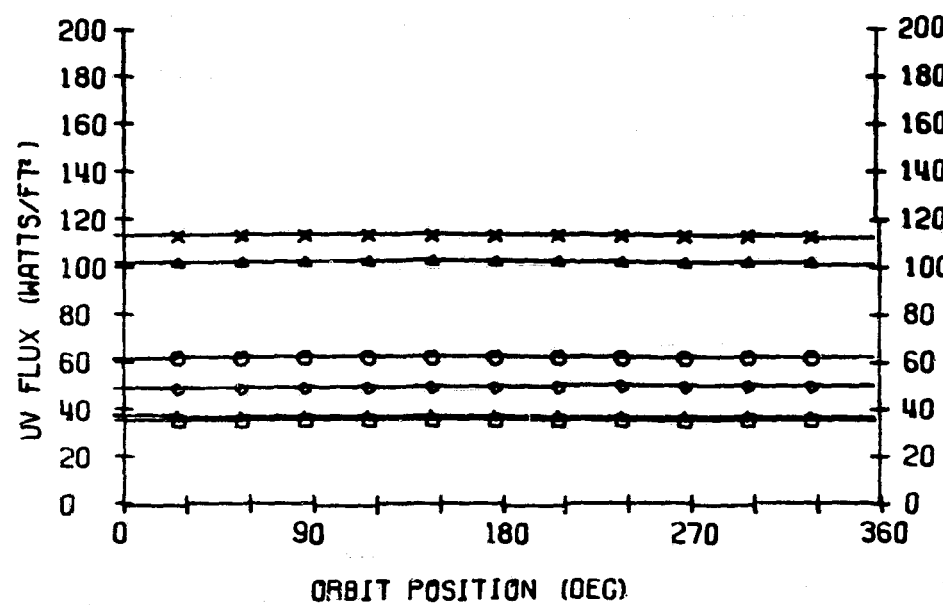
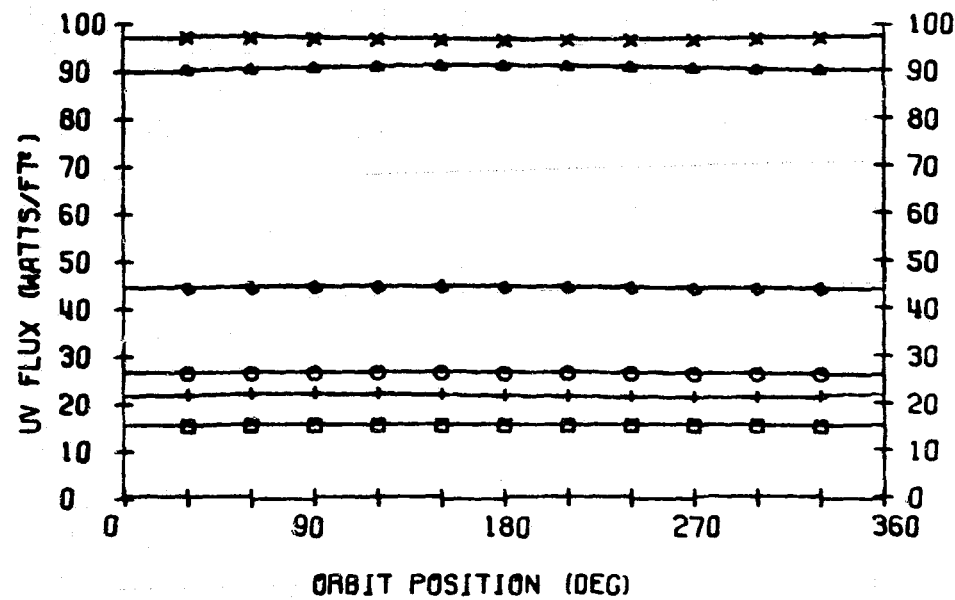
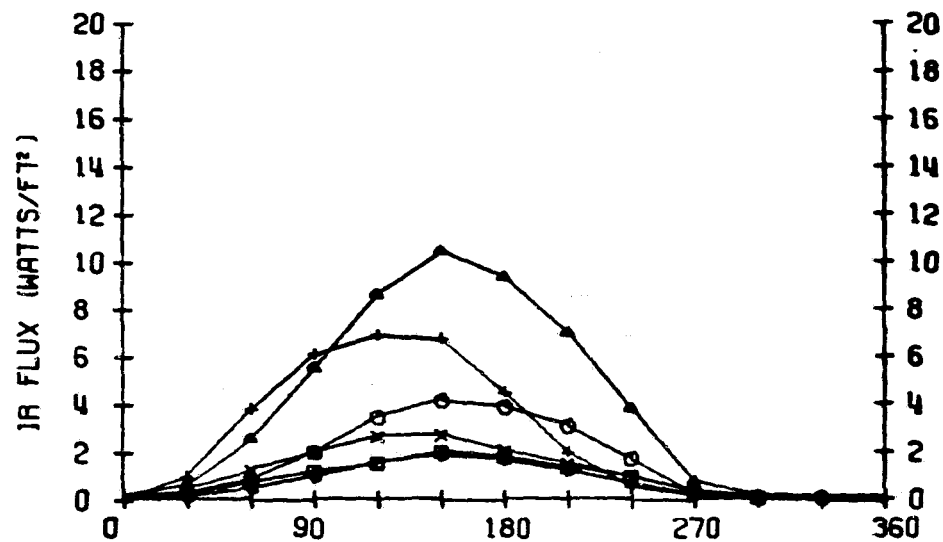
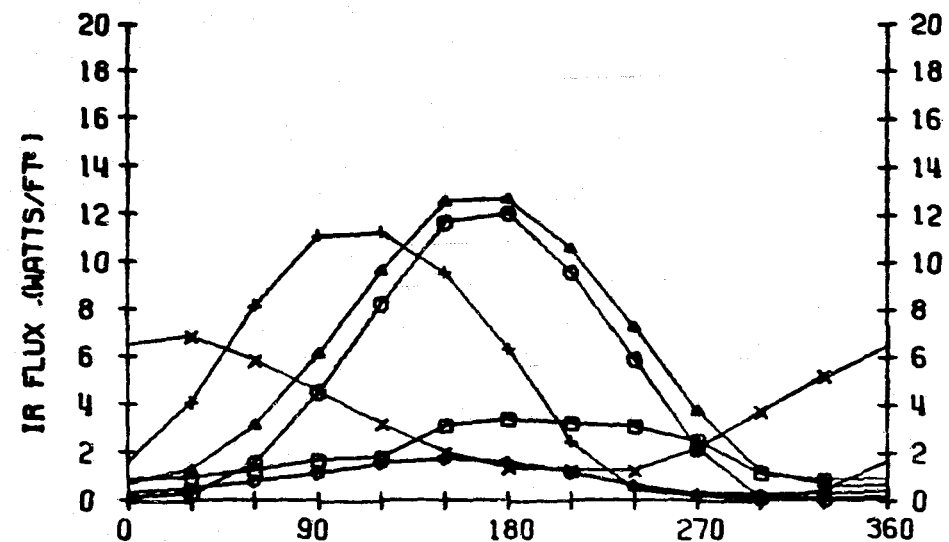
LOCATION 4



450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5

LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	27.9	28.1	19.8	34.1	28.9	41.3
R	+Y (○)	36.8	31.4	20.0	46.1	22.8	50.1
F	+Z (△)	0.6	0.4	0.2	8.2	3.3	15.2
L	-X (+)	28.6	28.3	22.0	33.7	19.6	35.3
U	-Y (X)	22.9	19.6	13.2	31.7	15.9	35.7
X	-Z (◇)	44.5	55.7	44.2	44.2	46.3	49.6

OREITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

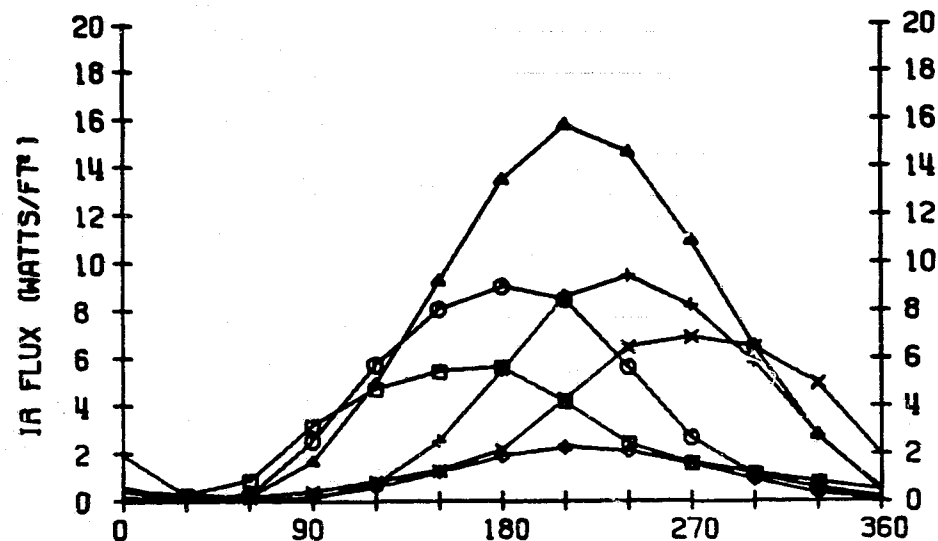
FOR

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

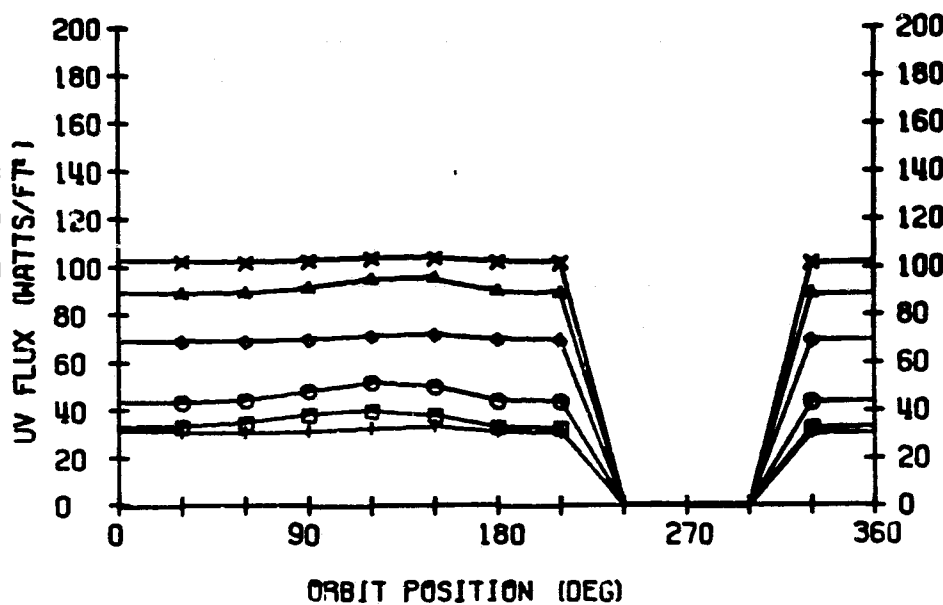
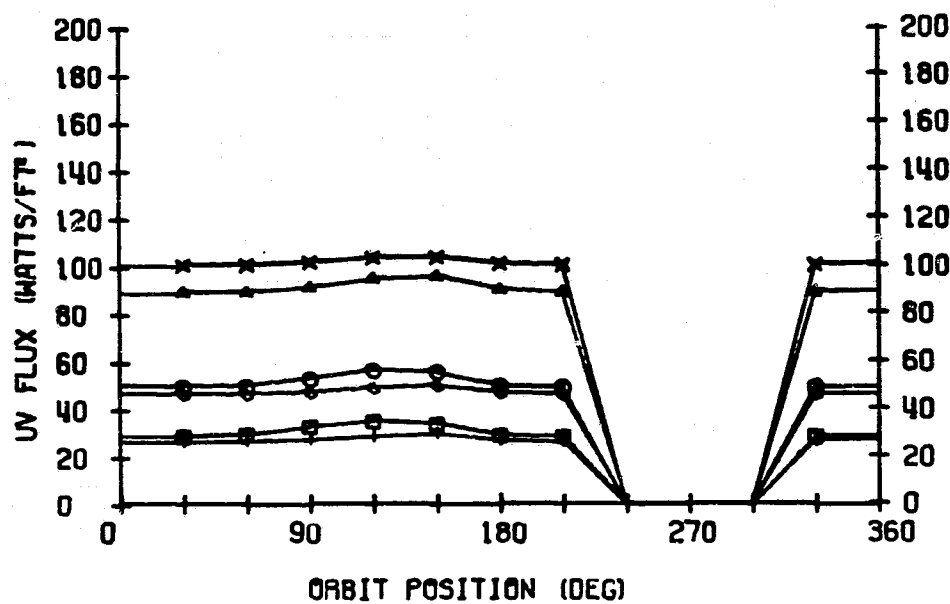
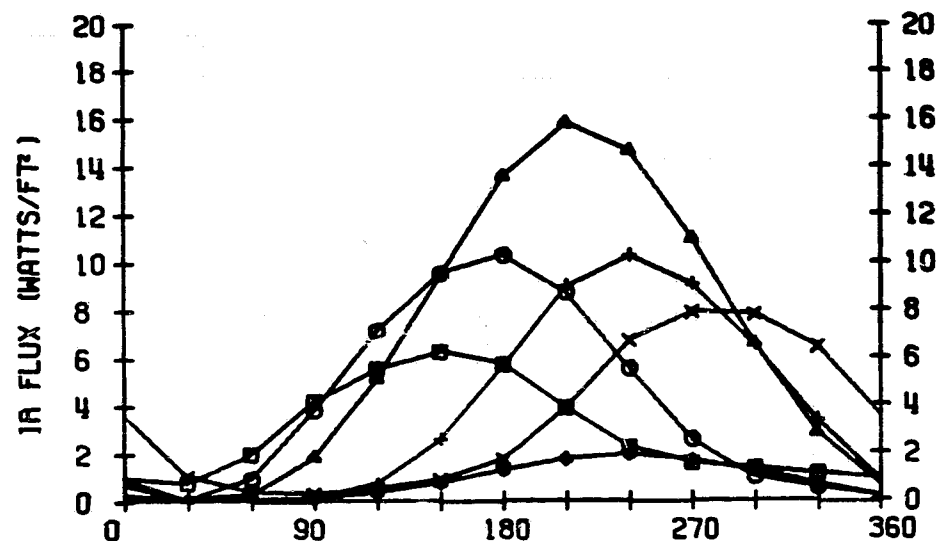
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.5	3.0	3.5	1.9	1.9	1.0
R	+Y (○)	3.7	4.2	5.2	2.2	4.7	1.8
F	+Z (Δ)	6.7	6.8	6.8	5.7	6.5	4.9
L	-X (+)	3.7	4.0	4.6	2.9	4.8	2.9
U	-Y (x)	3.0	3.4	4.5	1.9	4.5	1.7
X	-Z (◇)	0.9	0.8	1.1	1.0	1.0	0.8
U	+X (□)	20.5	23.4	15.4	24.2	10.6	22.4
V	+Y (○)	34.5	30.7	22.0	40.6	19.3	40.4
F	+Z (Δ)	60.6	60.5	60.5	65.4	60.9	66.9
L	-X (+)	18.6	21.2	15.5	22.5	14.8	23.8
U	-Y (x)	67.7	68.4	64.9	73.8	64.5	74.4
X	-Z (◇)	31.4	46.3	31.1	30.6	29.7	31.6

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 1

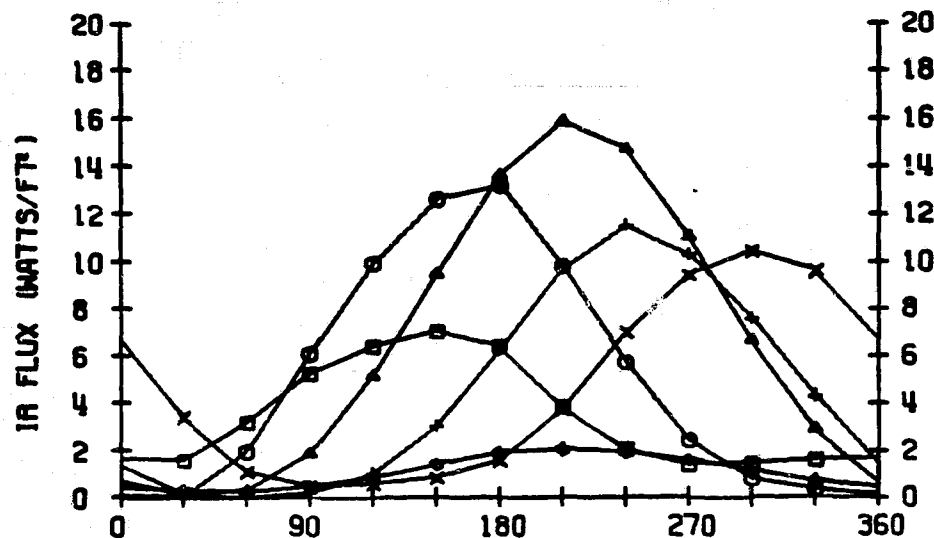


LOCATION 2

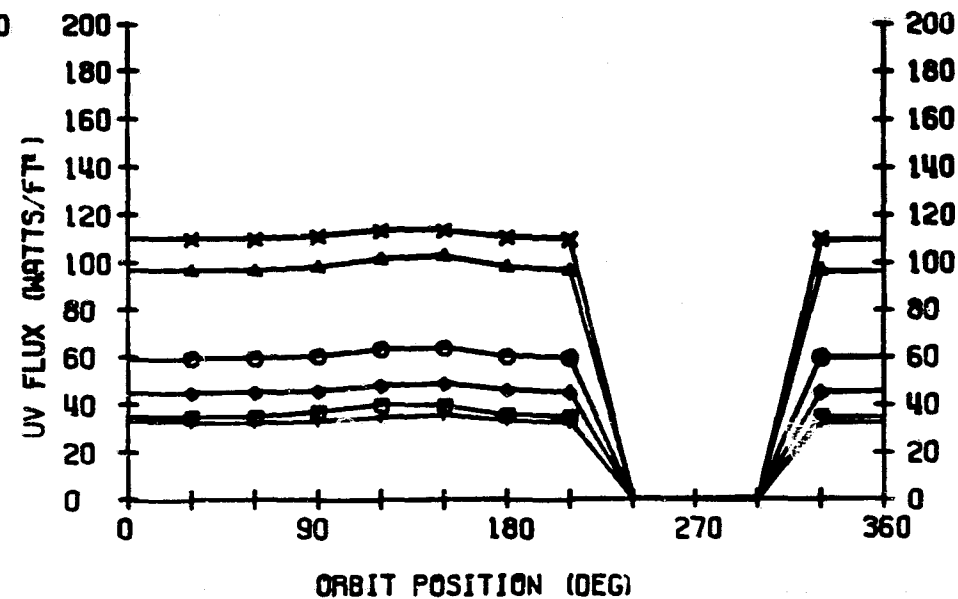
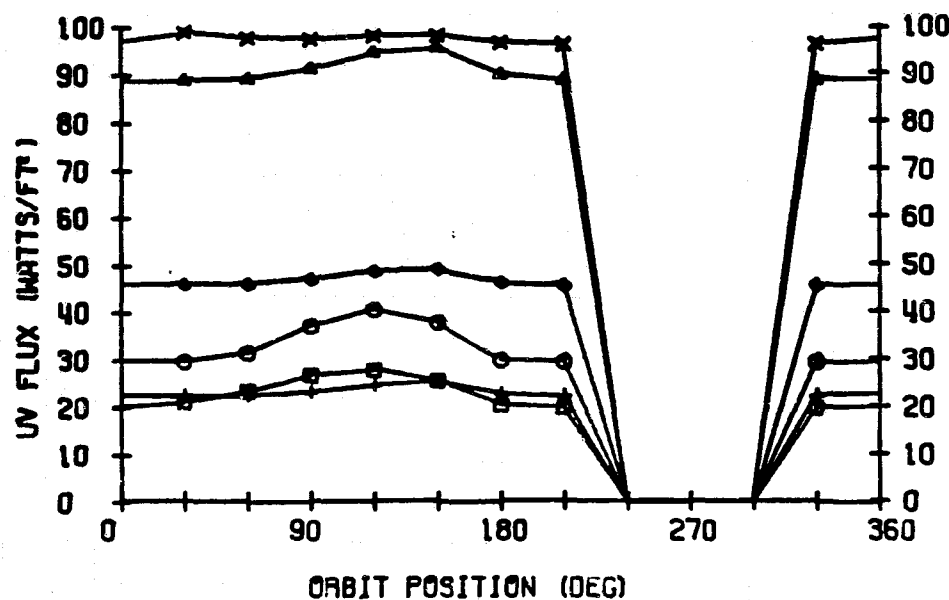
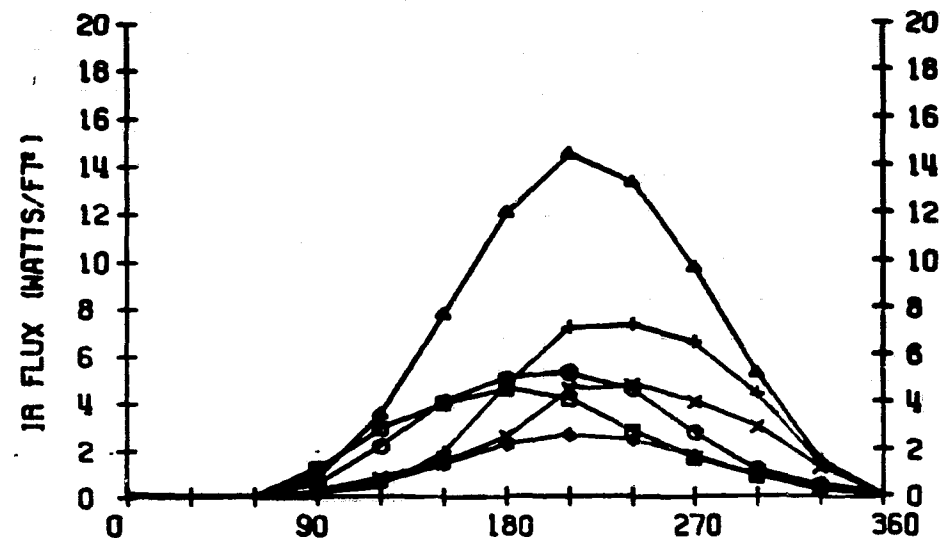


450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 3

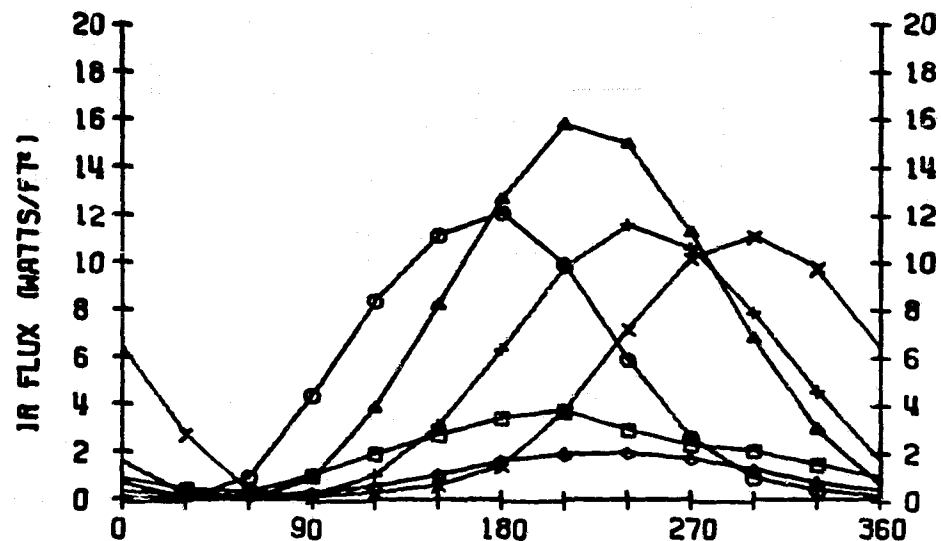


LOCATION 4

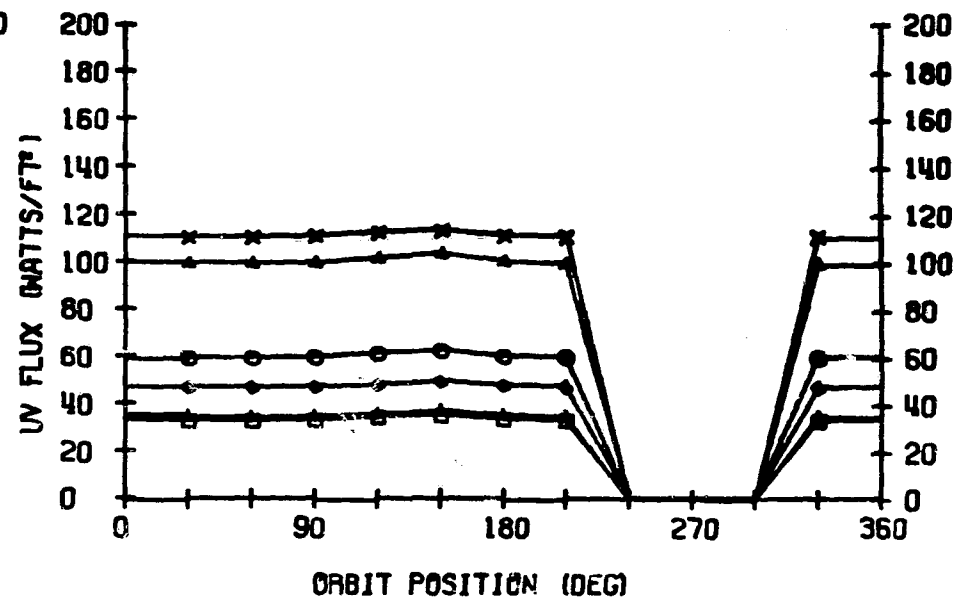
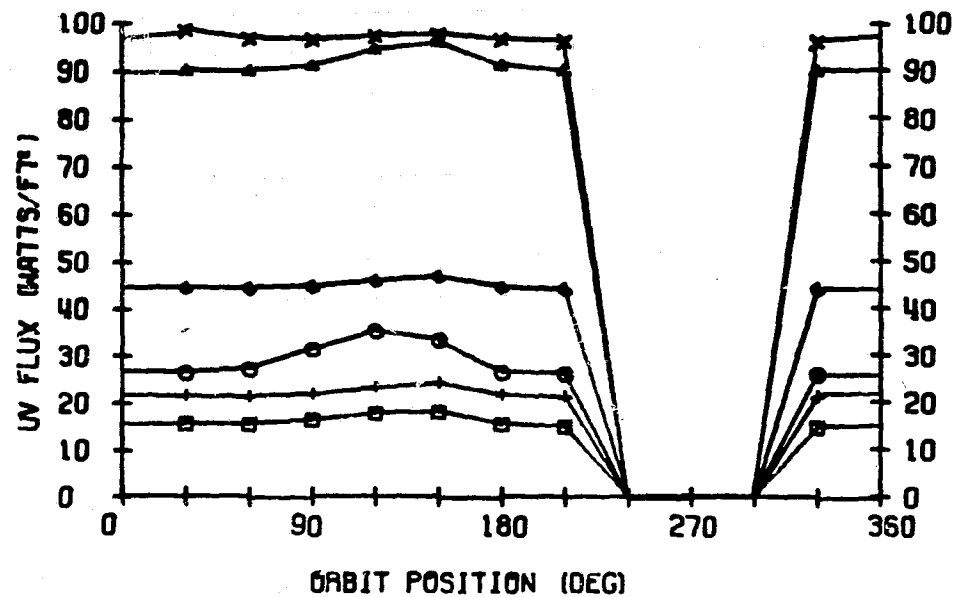
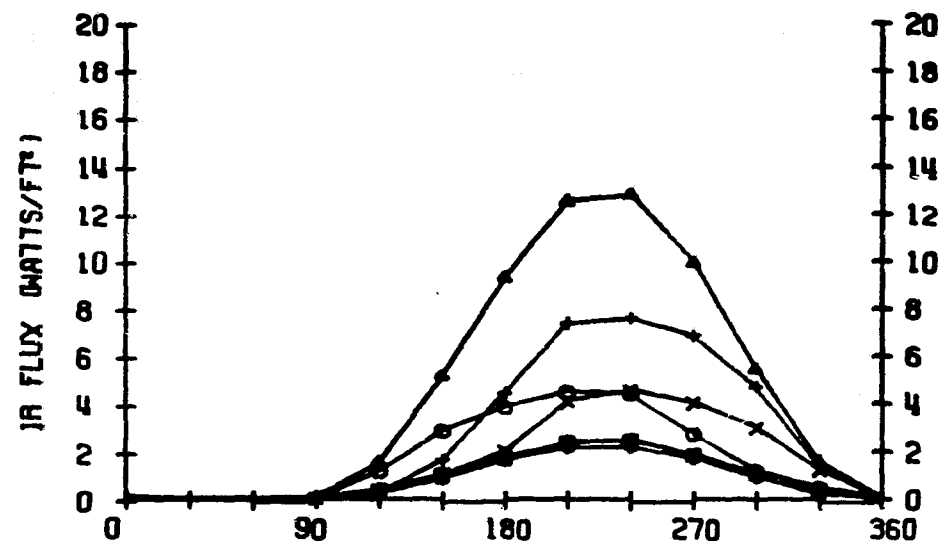


450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=-45 DEG * +Z SOLAR INERTIAL * 45 DEG ROLL ABOUT X-AXIS

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	22.1	22.0	15.6	26.9	23.1	32.8
R	+Y (○)	28.5	24.4	15.5	35.9	17.9	39.3
F	+Z (△)	0.5	0.2	0.2	6.4	2.7	12.1
L	-X (+)	22.5	22.1	17.3	26.5	15.5	27.9
U	-Y (X)	18.4	15.6	10.6	25.3	12.8	28.5
X	-Z (◇)	35.1	43.5	34.8	34.9	36.6	39.3

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 5

-y to sun, tail facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

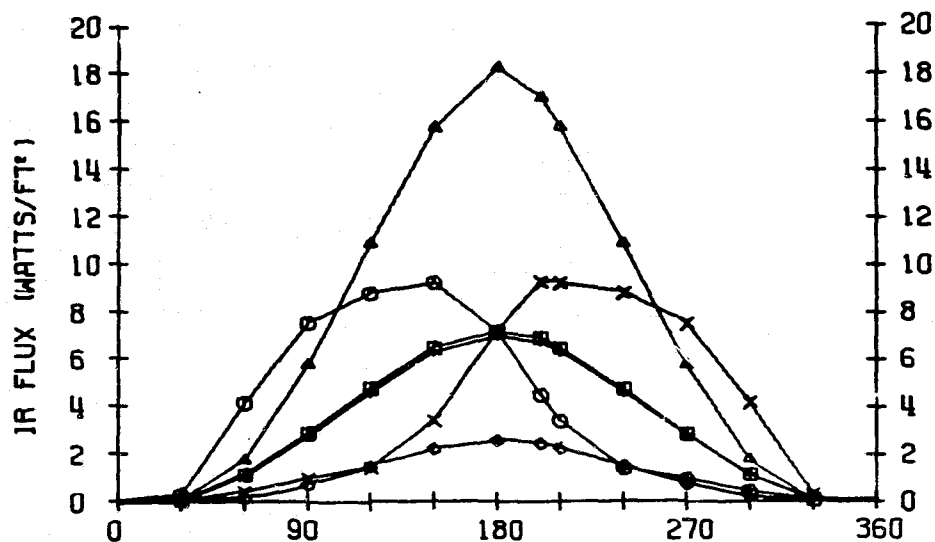
FOR

450 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

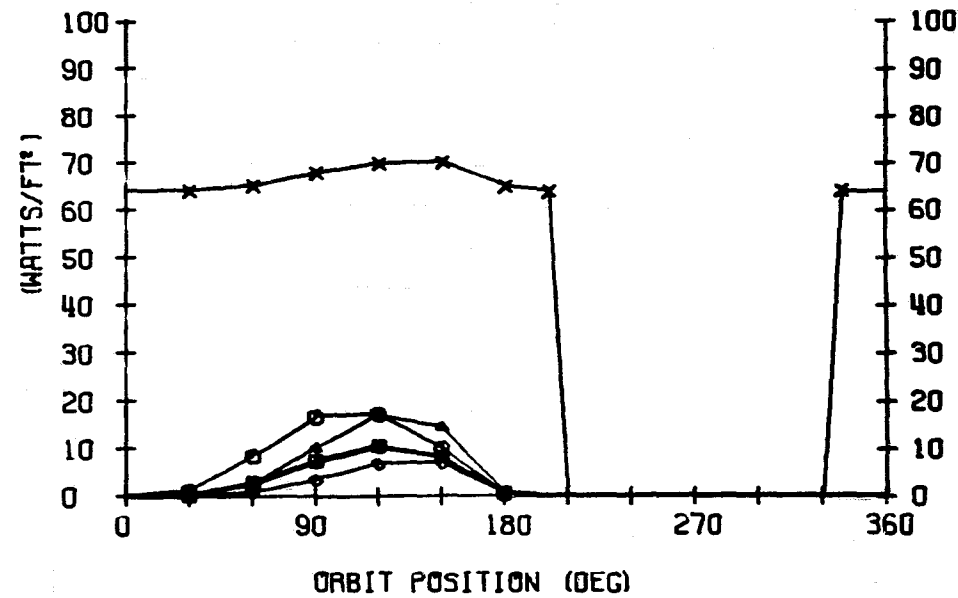
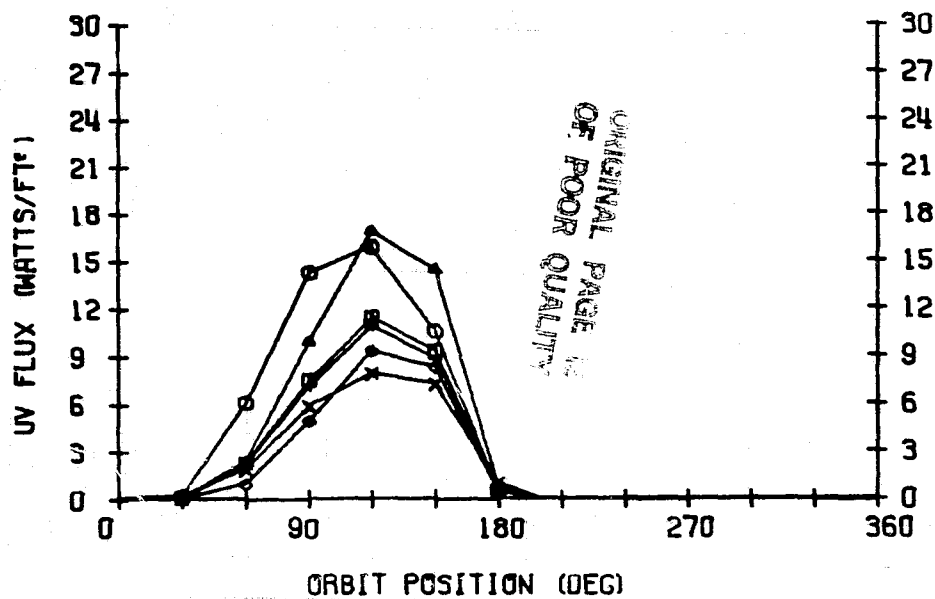
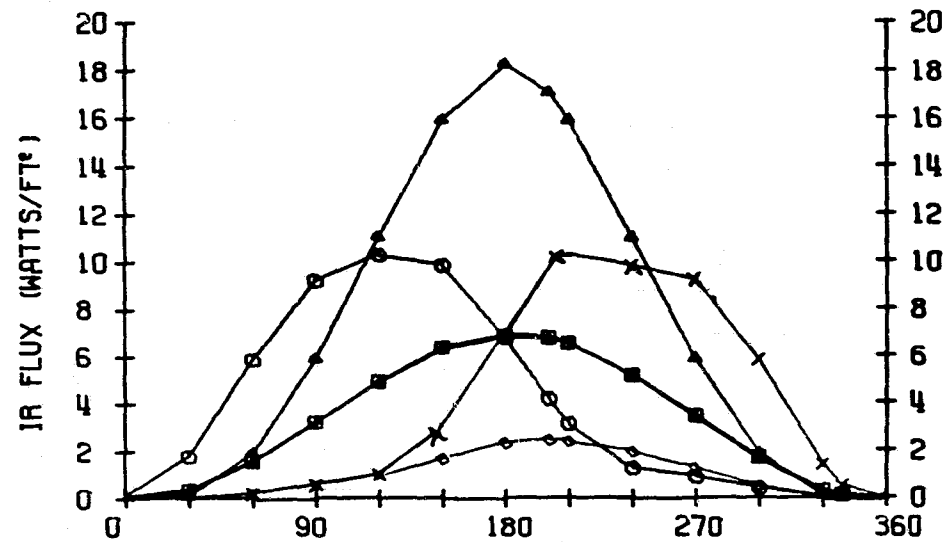
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.4	3.9	2.4	2.1	0.9
R	+Y (○)	3.6	4.1	5.2	2.2	4.8	1.7
F	+Z (△)	7.2	7.3	7.3	6.1	6.8	4.8
L	-X (⊕)	3.1	3.4	3.7	2.4	3.9	2.3
U	-Y (×)	3.6	4.1	5.2	2.2	4.8	1.7
X	-Z (◇)	1.0	1.0	1.1	1.1	0.9	0.8
U	+X (□)	2.6	2.5	2.8	2.4	2.3	1.8
V	+Y (○)	4.0	4.5	5.9	2.5	5.6	2.2
F	+Z (△)	3.7	3.8	3.8	3.3	3.7	3.0
L	-X (⊕)	2.5	2.5	2.8	2.3	2.8	2.2
U	-Y (×)	2.0	40.9	77.8	2.3	77.7	2.0
X	-Z (◇)	2.0	1.5	2.1	2.1	1.9	1.8

450 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

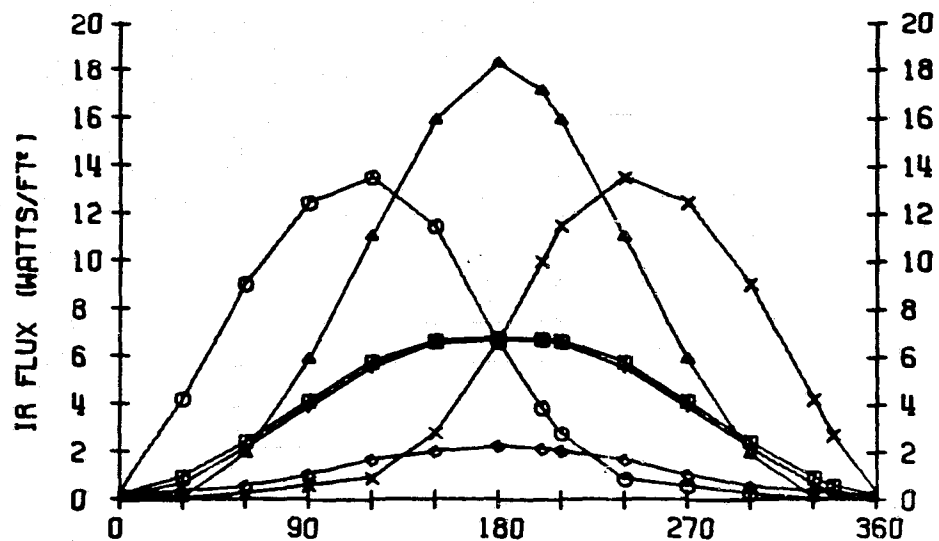


LOCATION 2

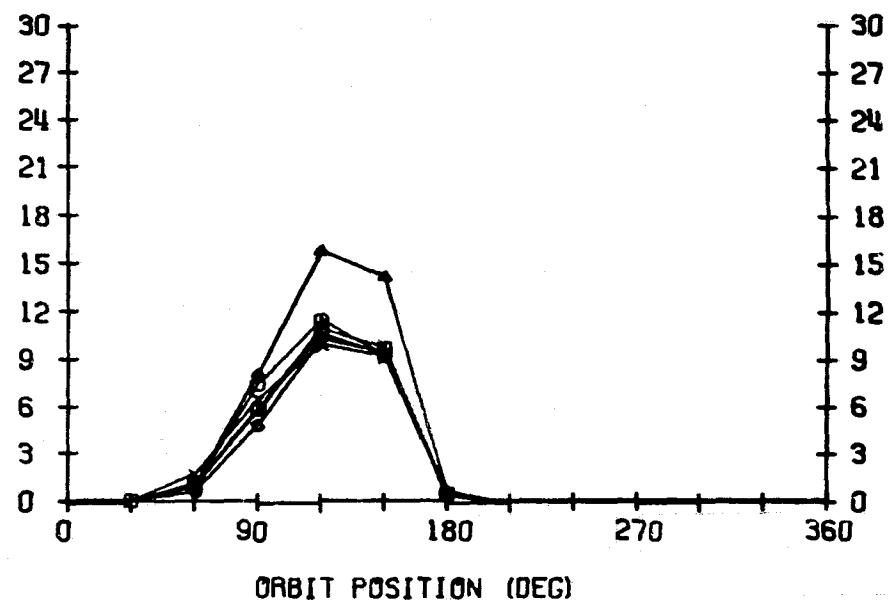
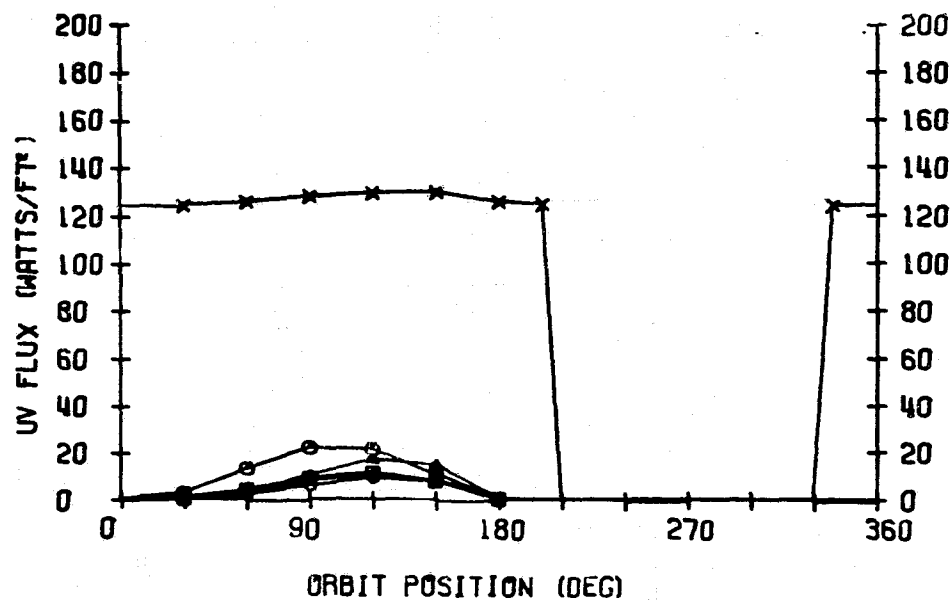
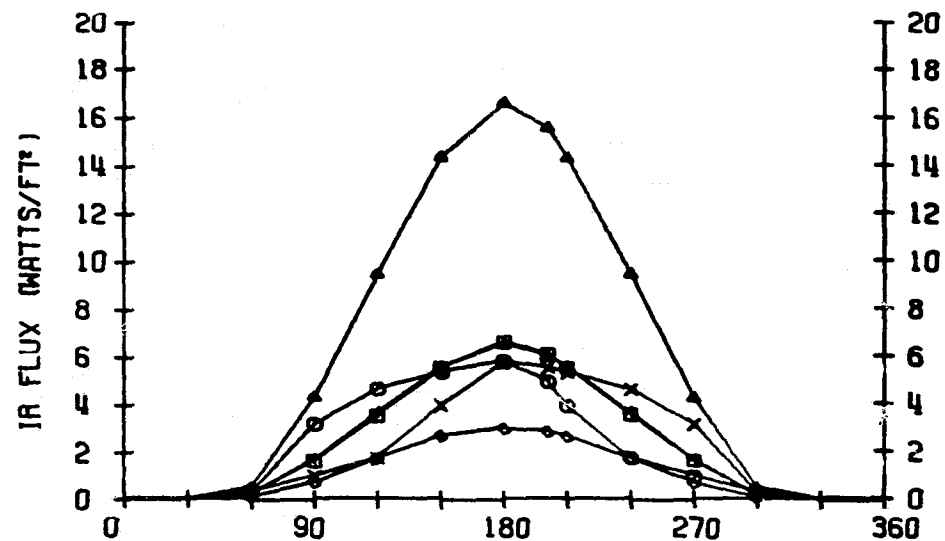


450 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

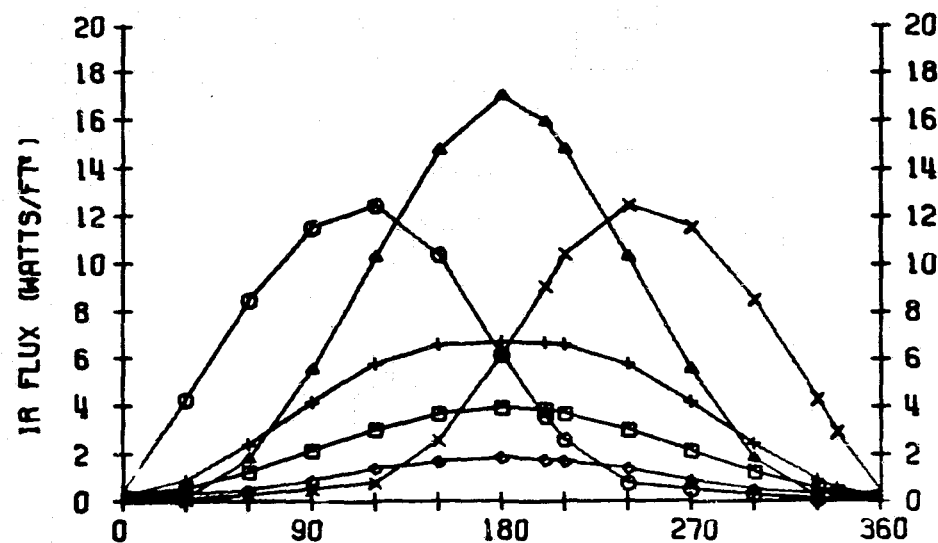


LOCATION 4

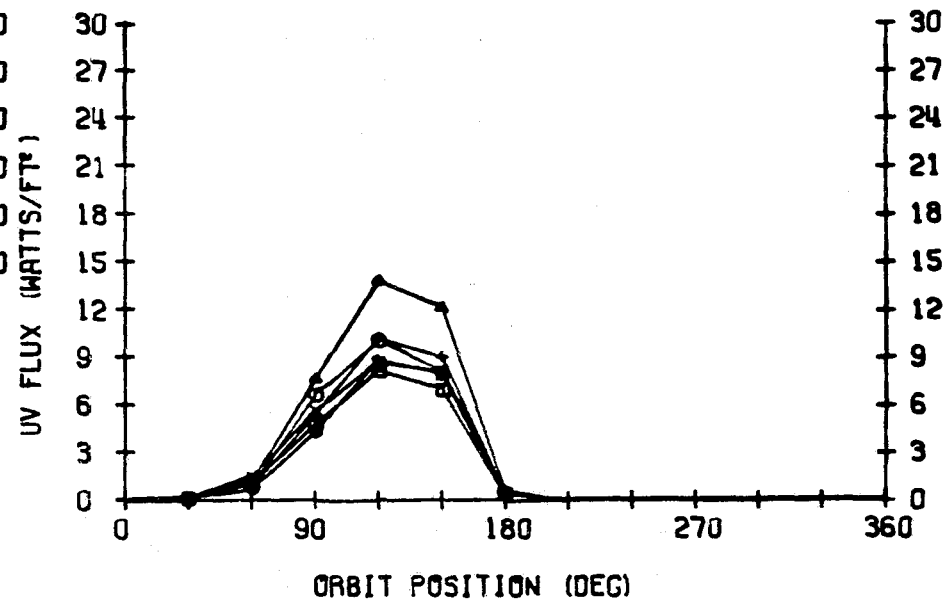
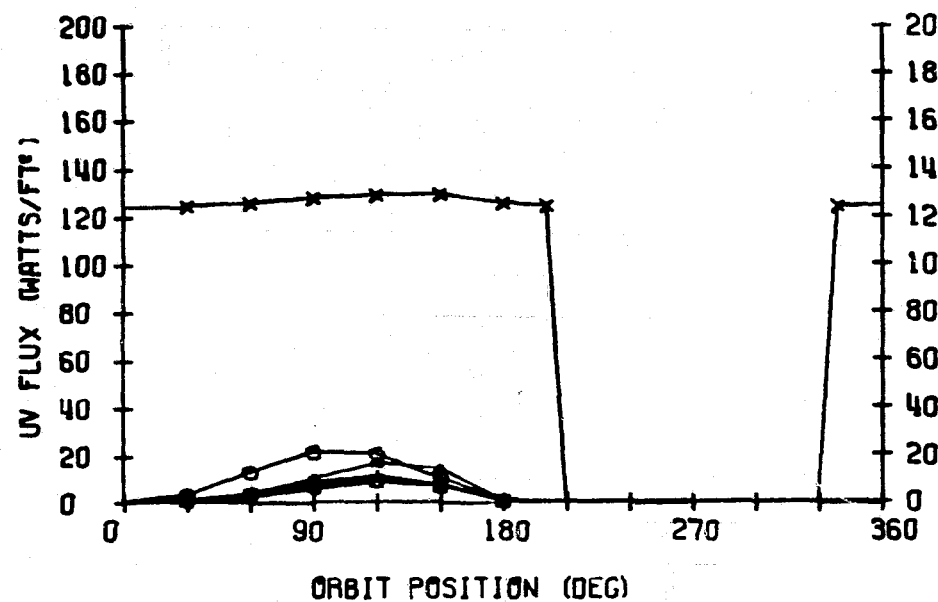
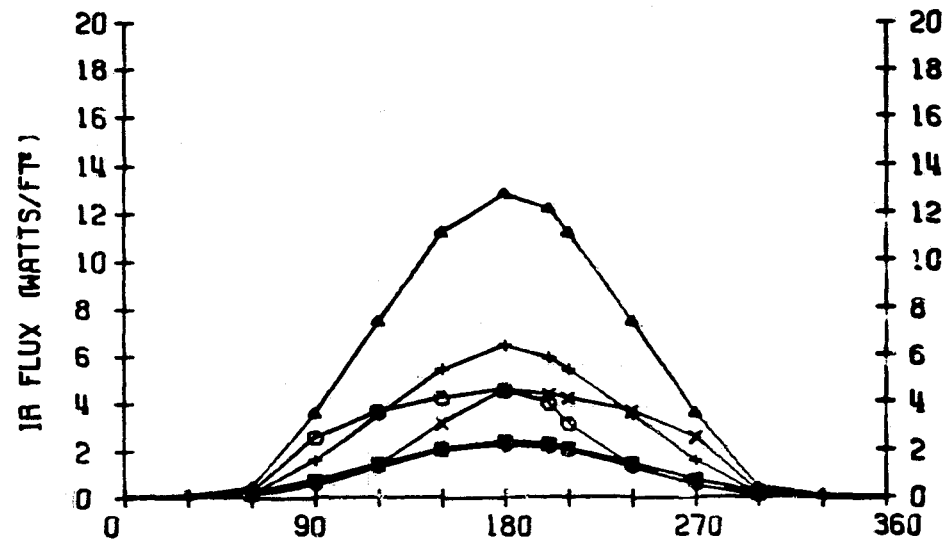


450 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	5.3	4.6	3.7	6.6	6.5	8.2
R	+Y (○)	5.1	4.3	2.9	7.0	3.6	7.4
F	+Z (△)	0.1	0.1	0.1	1.5	0.8	3.1
L	-X (+)	5.1	4.6	4.0	6.2	3.6	6.3
U	-Y (X)	5.6	4.4	3.3	7.4	3.8	7.7
X	-Z (◇)	8.4	8.6	8.1	8.8	8.4	8.9

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

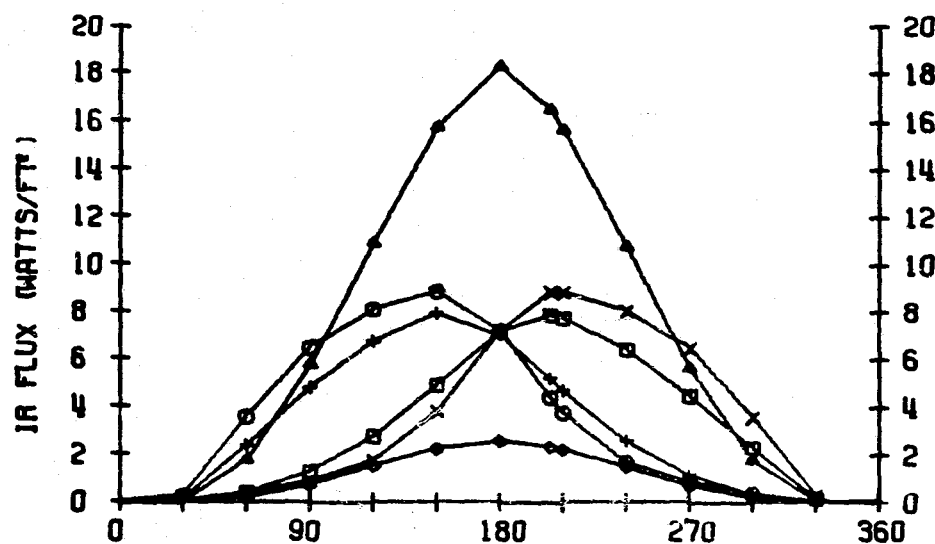
FOR

450 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

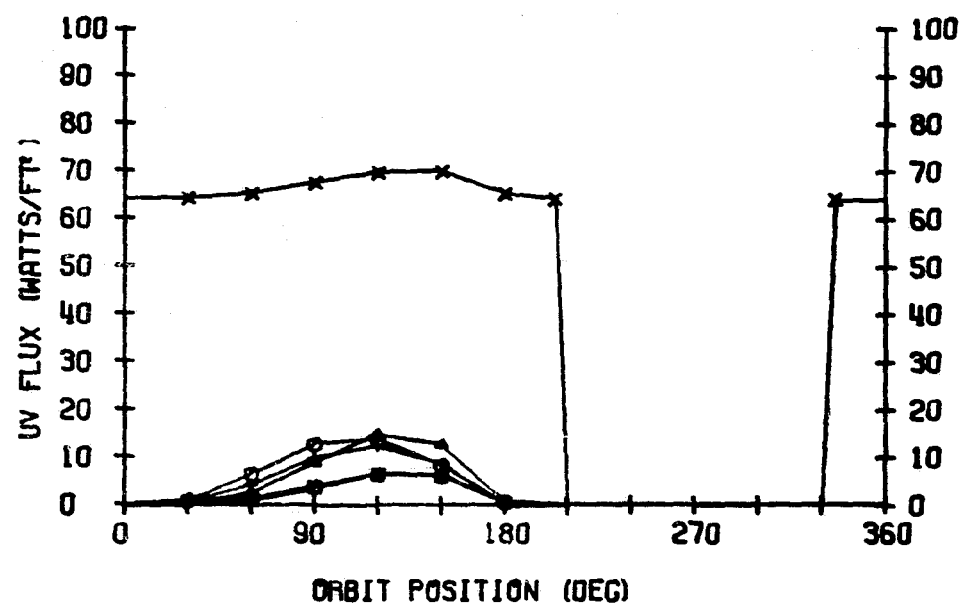
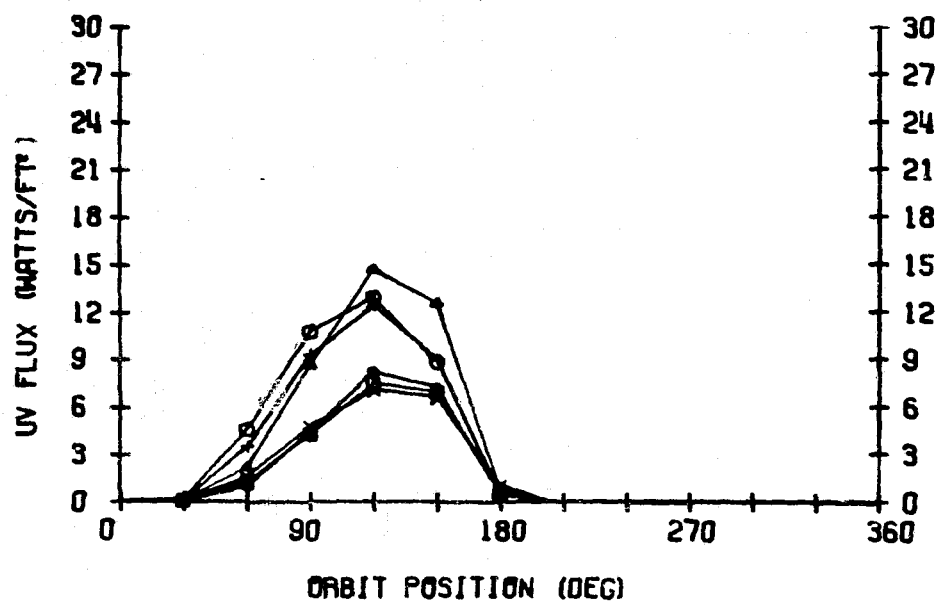
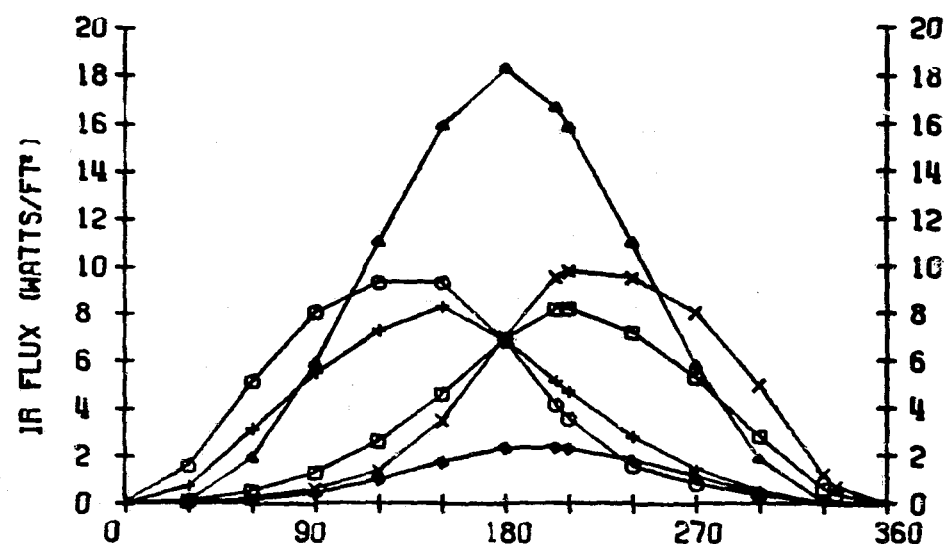
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.1	3.3	3.8	2.4	2.1	1.0
R	+Y (○)	3.4	3.9	4.8	2.2	4.8	1.8
F	+Z (Δ)	7.2	7.3	7.3	6.2	6.8	4.9
L	-X (+)	3.2	3.5	3.8	2.6	4.0	2.6
U	-Y (x)	3.4	3.8	4.8	2.2	4.3	1.7
X	-Z (◇)	1.0	0.9	1.1	1.1	0.9	0.8
U	+X (□)	1.7	1.5	1.6	1.8	2.4	2.0
V	+Y (○)	3.1	3.5	4.5	2.2	4.9	2.3
F	+Z (Δ)	3.2	3.3	3.3	3.0	3.5	3.2
L	-X (+)	2.9	3.0	3.5	2.6	3.6	2.8
U	-Y (x)	1.8	42.0	79.9	2.1	80.1	2.2
X	-Z (◇)	1.8	1.4	1.8	1.9	2.0	2.0

450 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

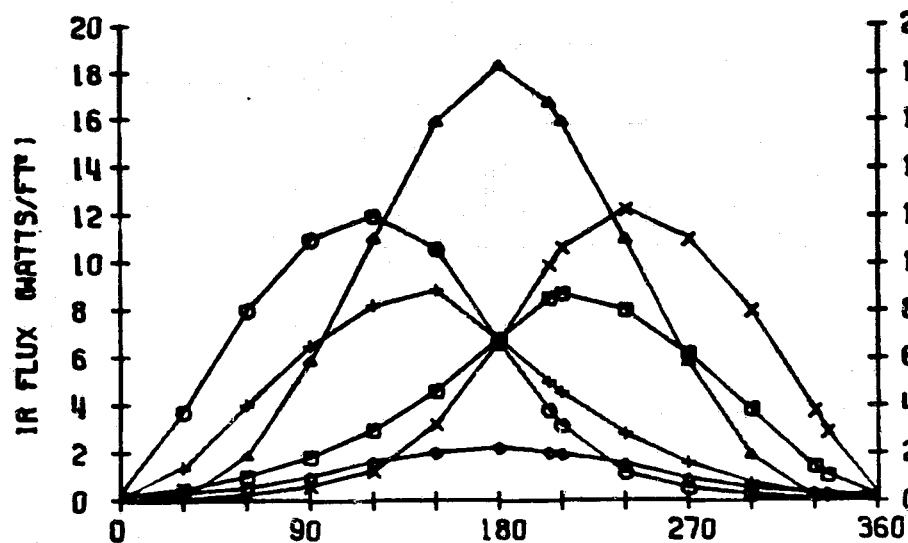


LOCATION 2

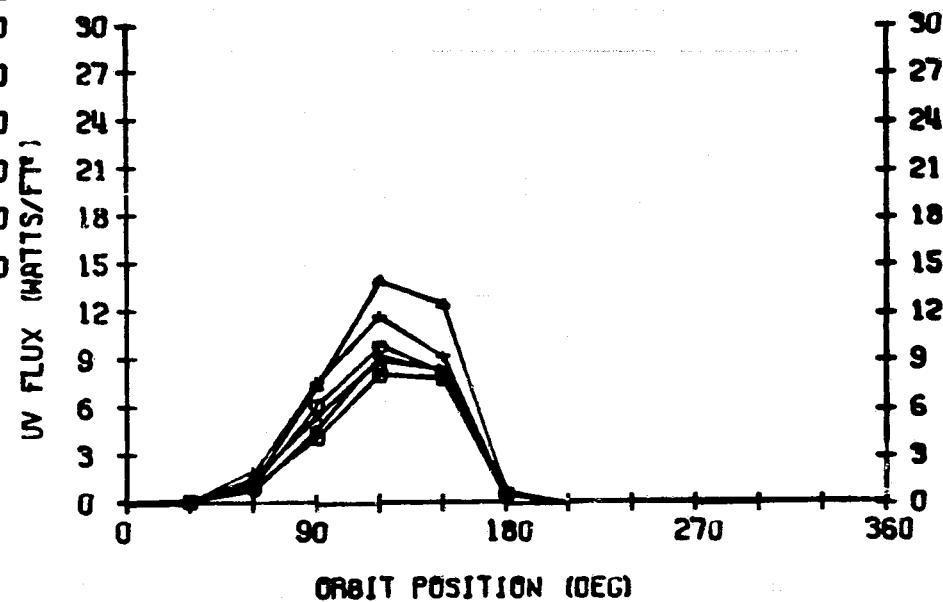
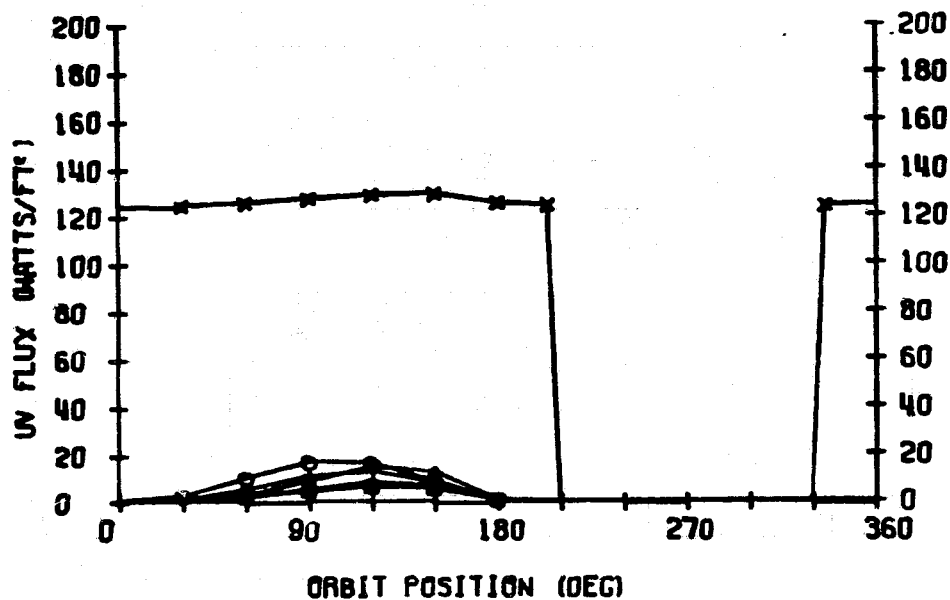
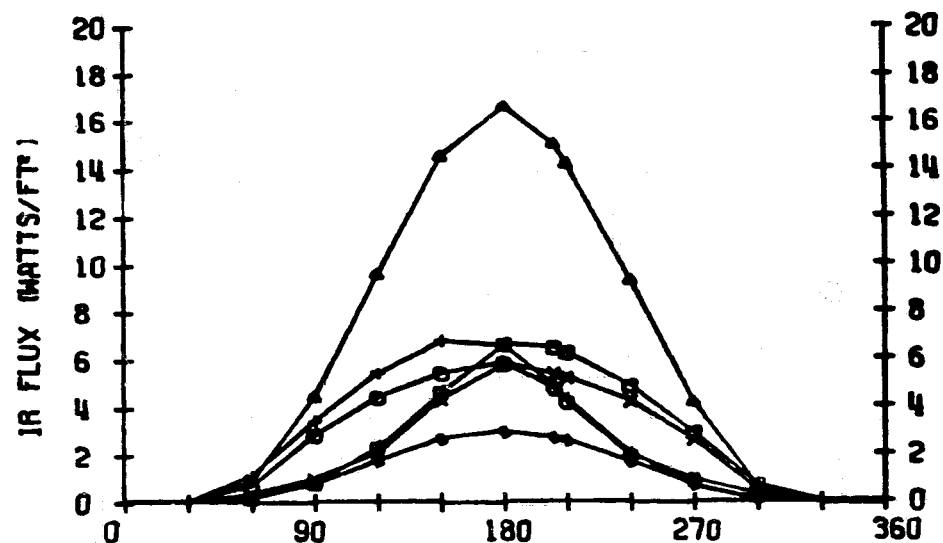


450 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

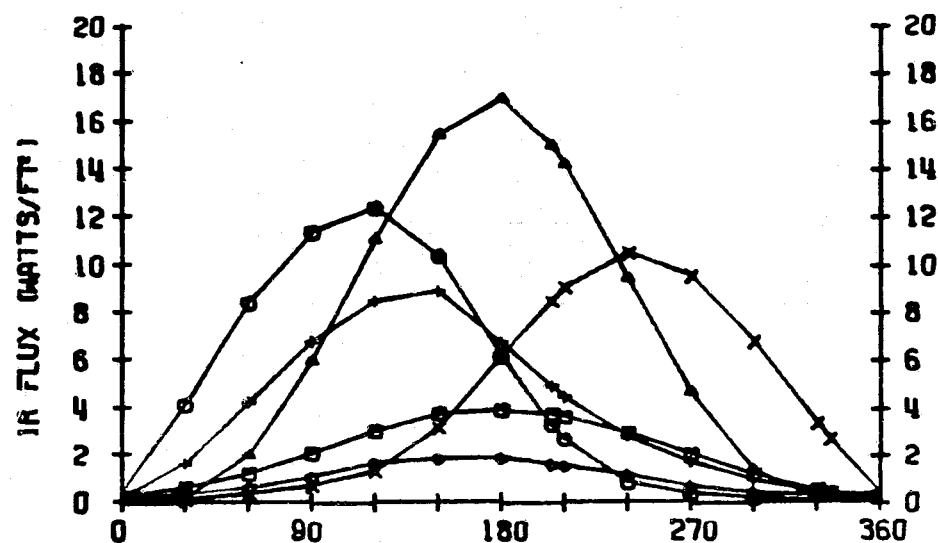


LOCATION 4

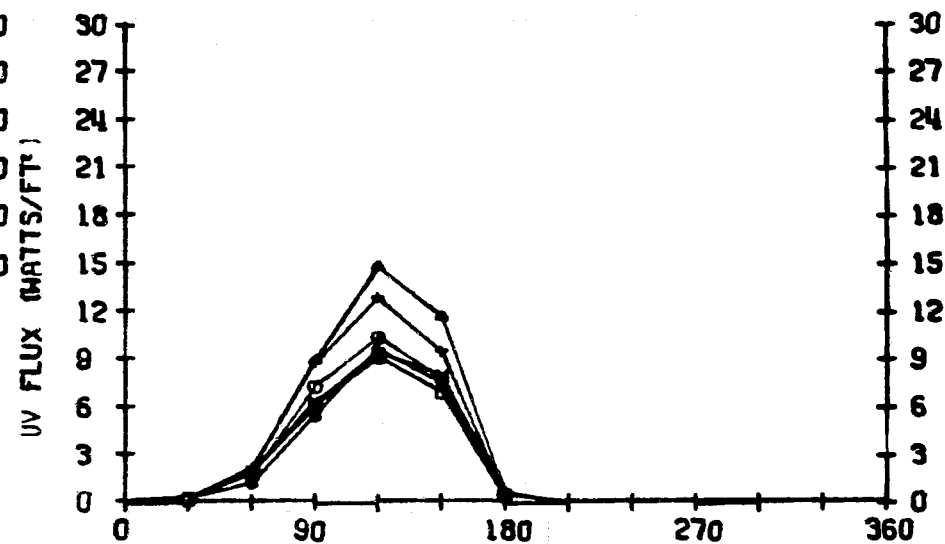
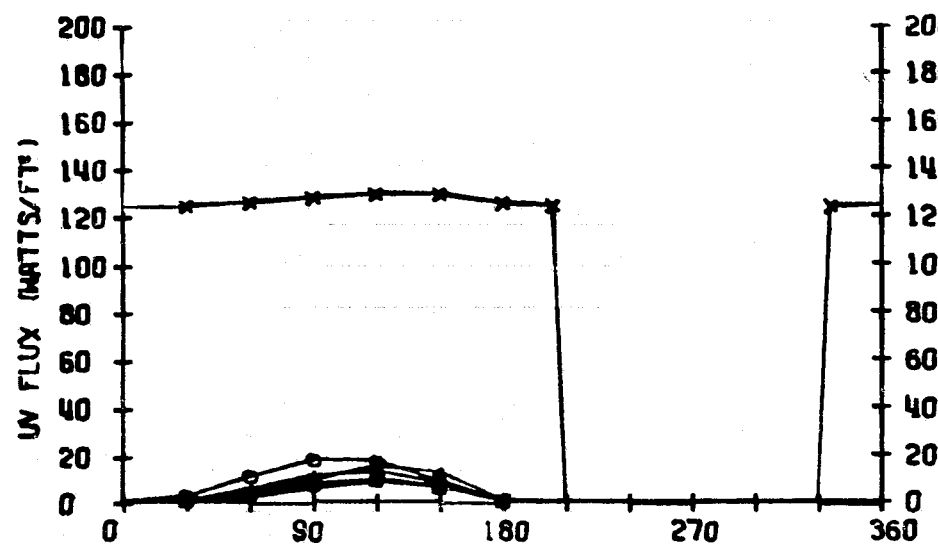
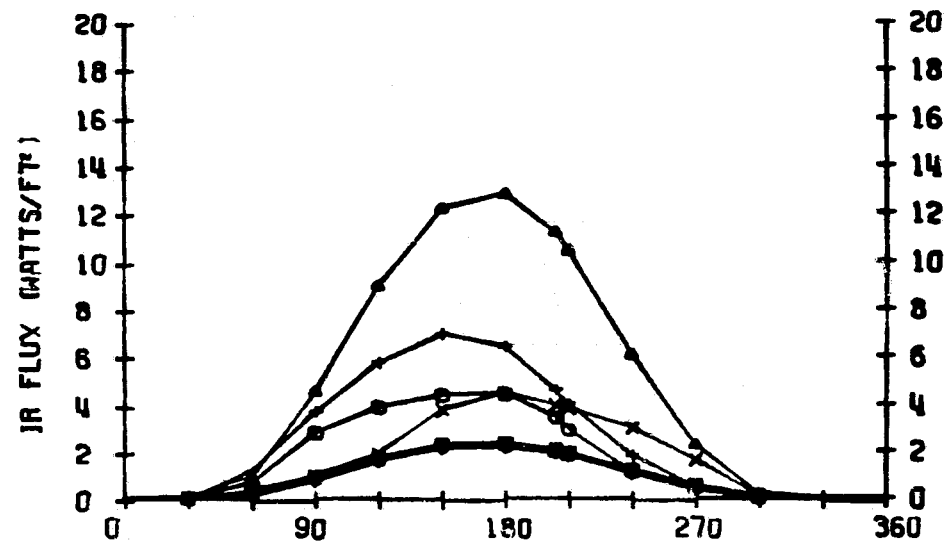


450 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=30 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	5.2	4.6	3.7	6.4	6.7	8.5
R	+Y (○)	4.9	4.2	2.8	6.8	3.6	7.5
F	+Z (△)	0.1	0.1	0.1	1.4	0.8	3.2
L	-X (+)	4.9	4.4	3.8	6.0	3.6	6.3
U	-Y (X)	5.3	4.2	3.1	7.1	3.8	7.9
X	-Z (◇)	8.1	8.3	7.8	8.7	8.6	9.1

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

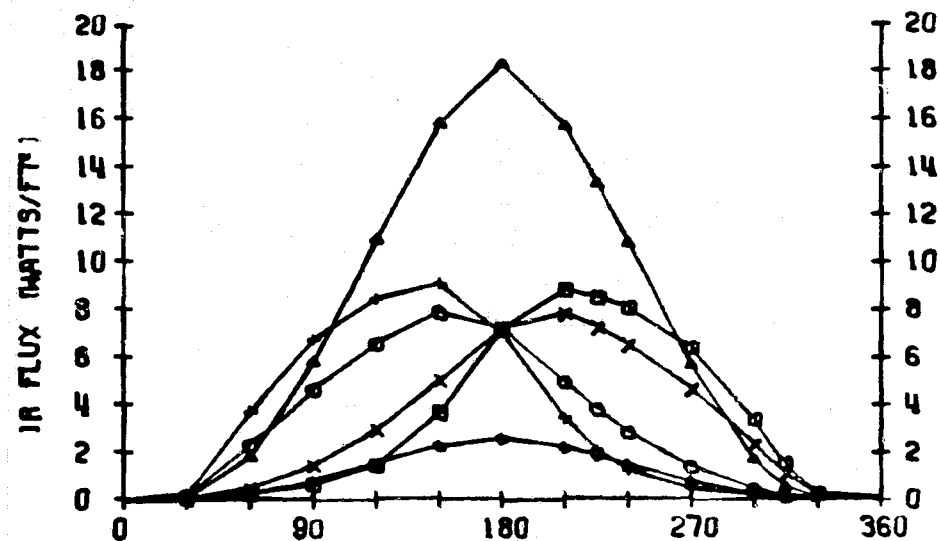
FOR

450 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

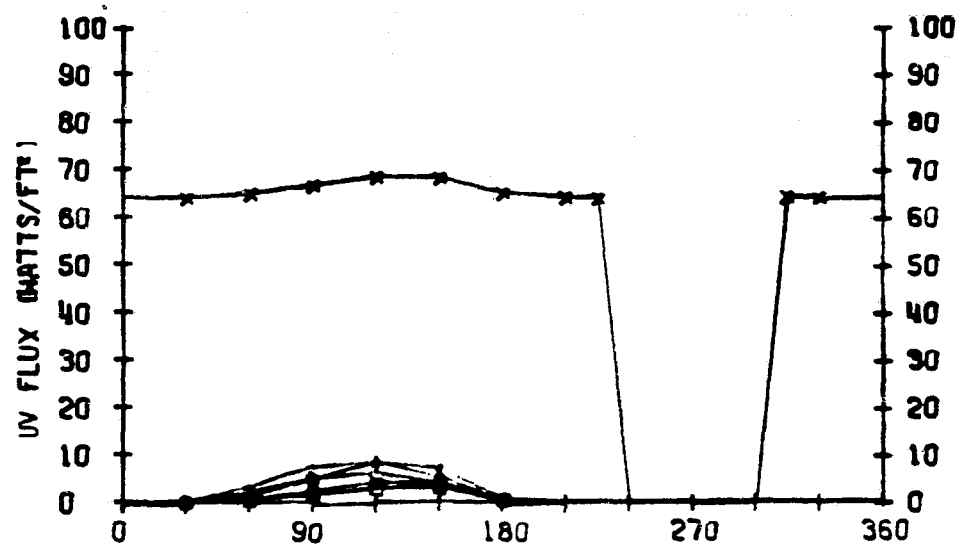
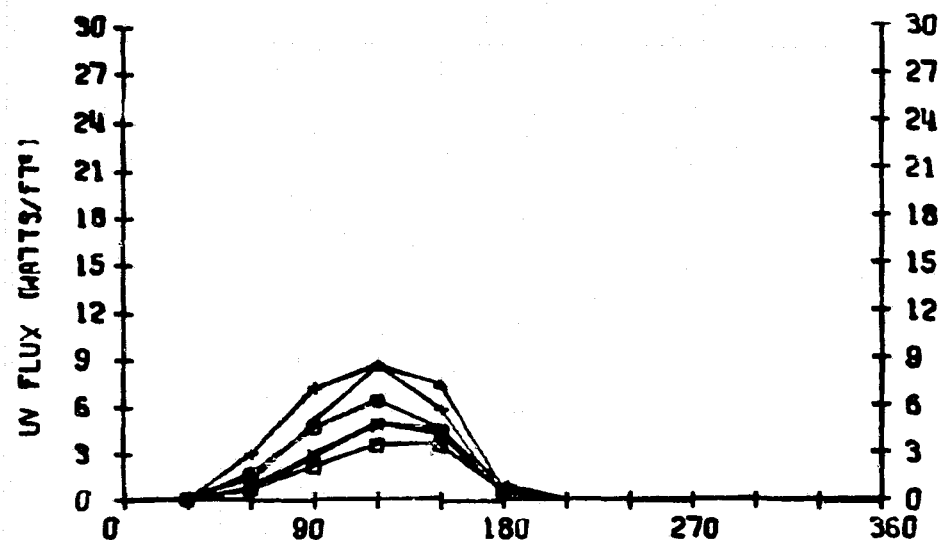
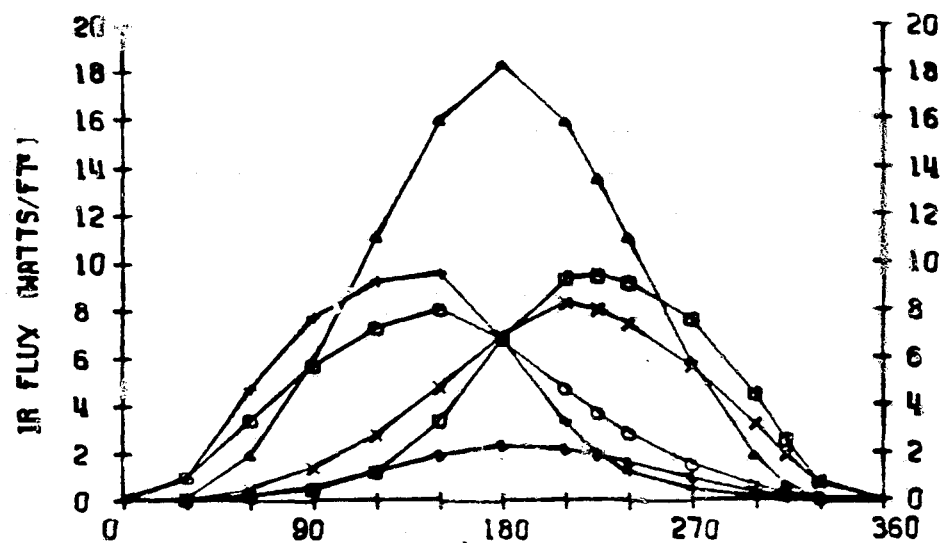
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.3	3.6	4.0	2.6	1.9	1.0
R	+Y (○)	3.2	3.5	4.0	2.2	3.9	1.8
F	+Z (Δ)	7.2	7.3	7.3	6.3	6.7	4.9
L	-X (+)	3.4	3.7	4.2	2.8	4.3	2.8
U	-Y (X)	3.2	3.5	4.2	2.2	3.6	1.7
X	-Z (◇)	1.0	0.9	1.0	1.1	0.9	0.9
U	+X (□)	0.9	0.7	0.7	1.0	1.6	1.4
V	+Y (○)	1.5	1.5	1.8	1.3	2.1	1.5
F	+Z (Δ)	1.9	1.9	1.9	1.8	2.1	2.1
L	-X (+)	2.1	2.3	2.6	1.8	2.7	2.1
U	-Y (X)	1.2	49.3	94.6	1.3	94.9	1.5
X	-Z (◇)	1.1	1.0	1.0	1.2	1.3	1.3

450 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

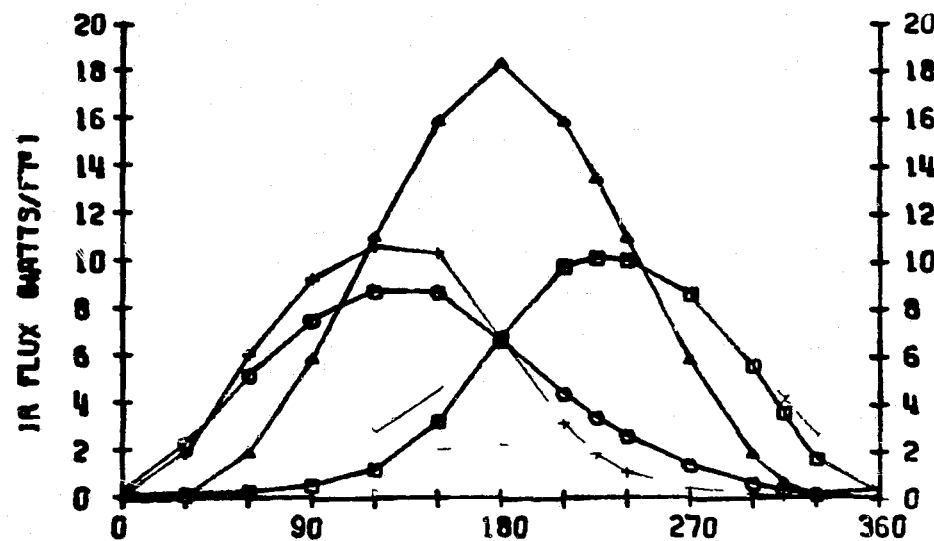


ORBIT POSITION (DEG)

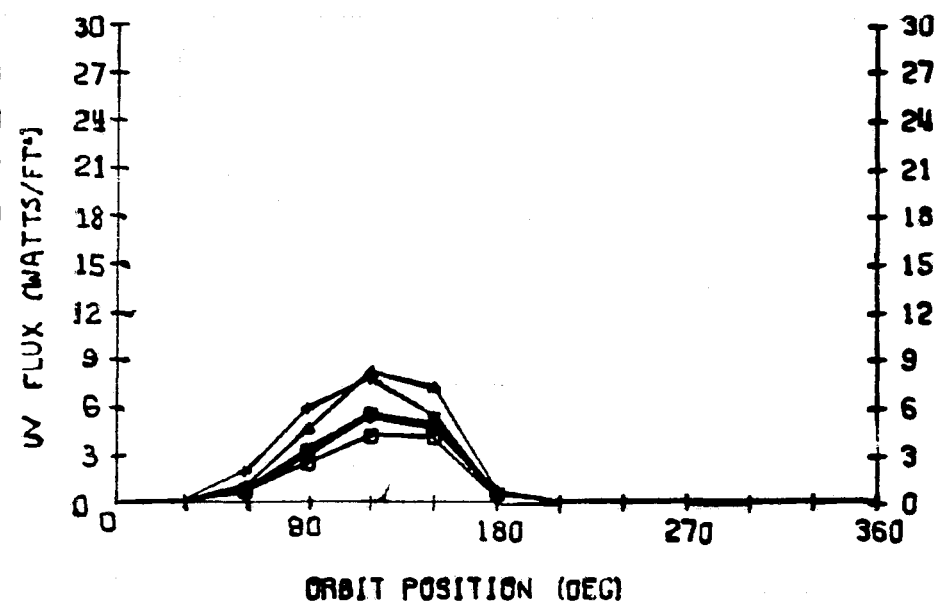
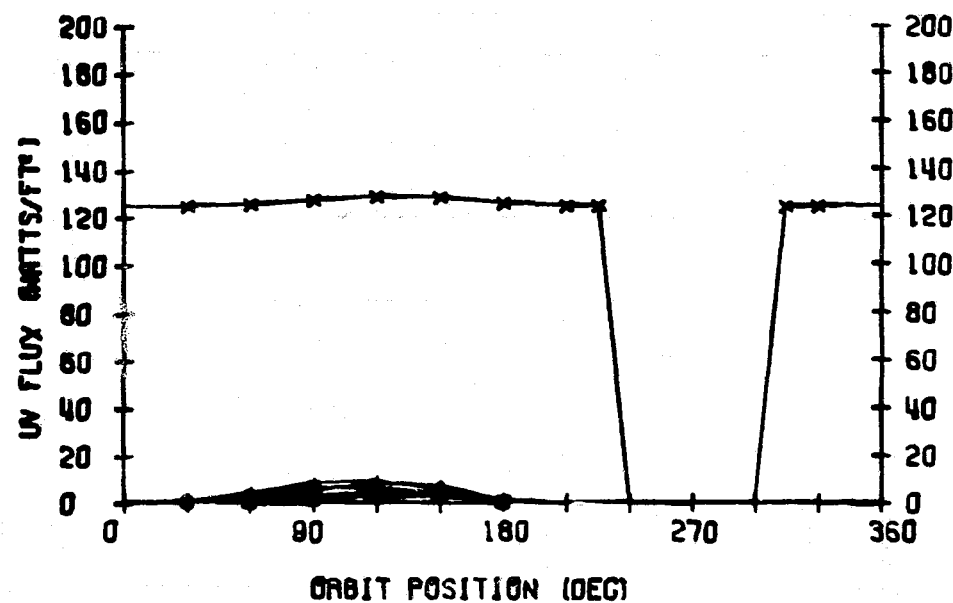
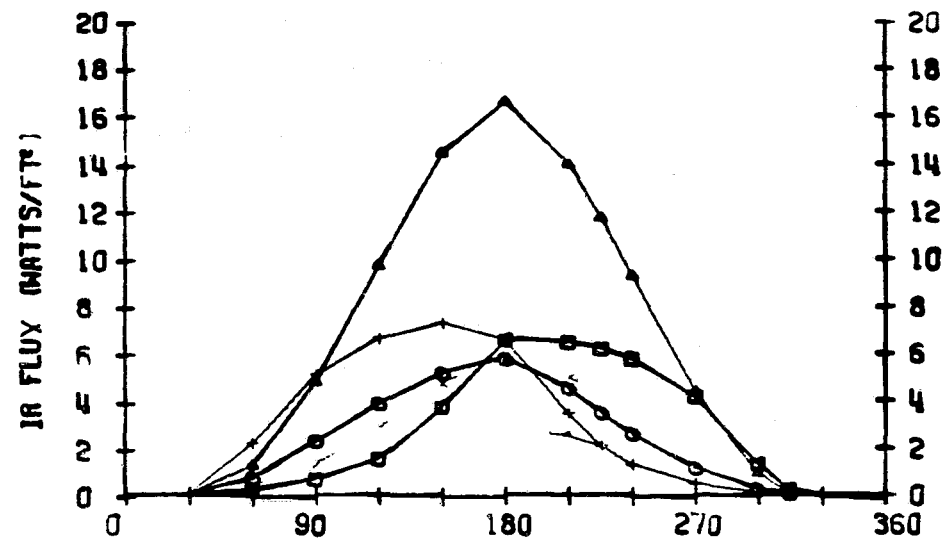
ORBIT POSITION (DEG)

450 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

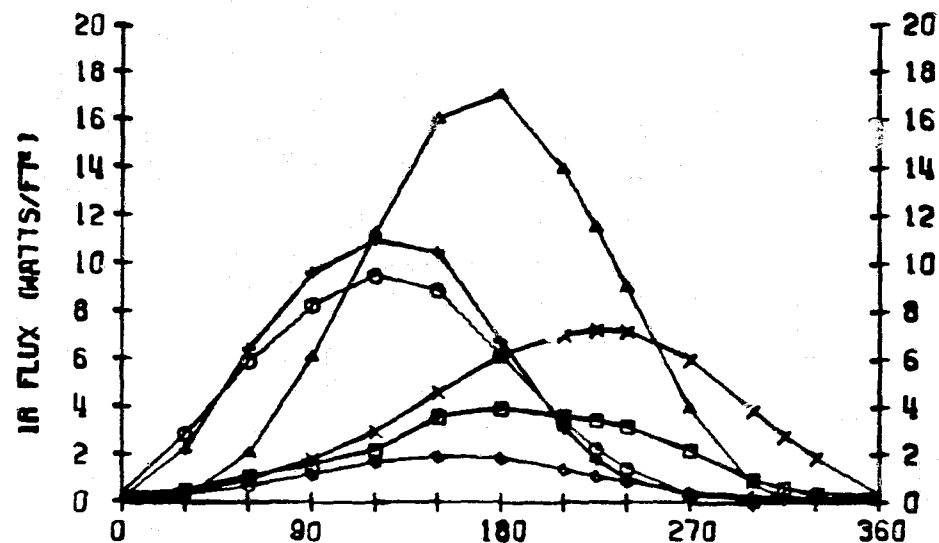


LOCATION 4

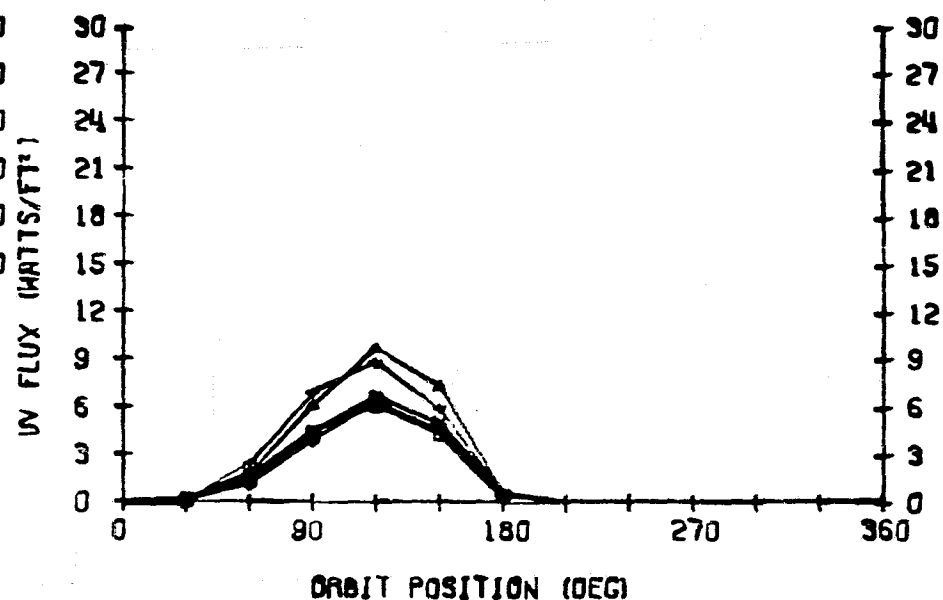
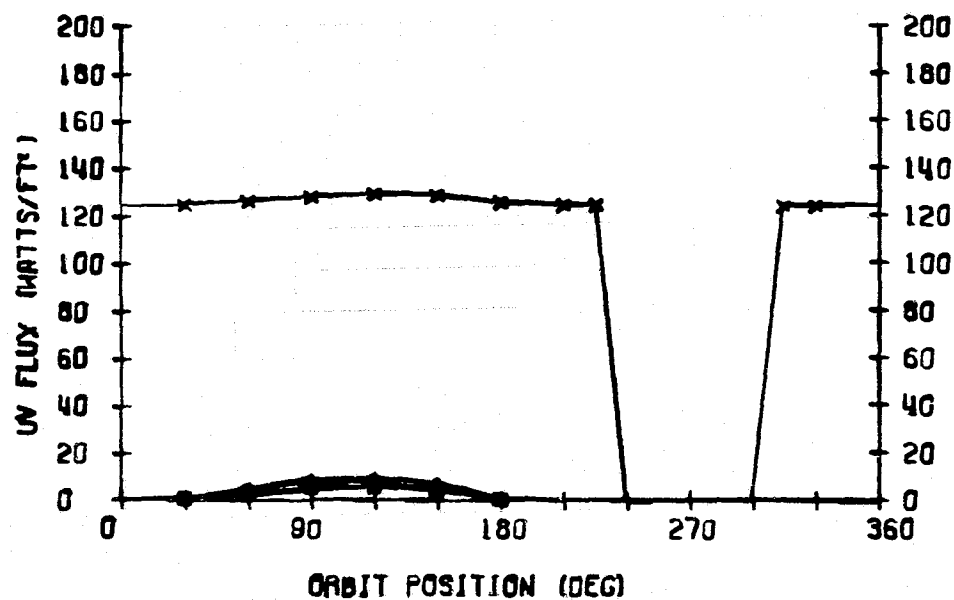
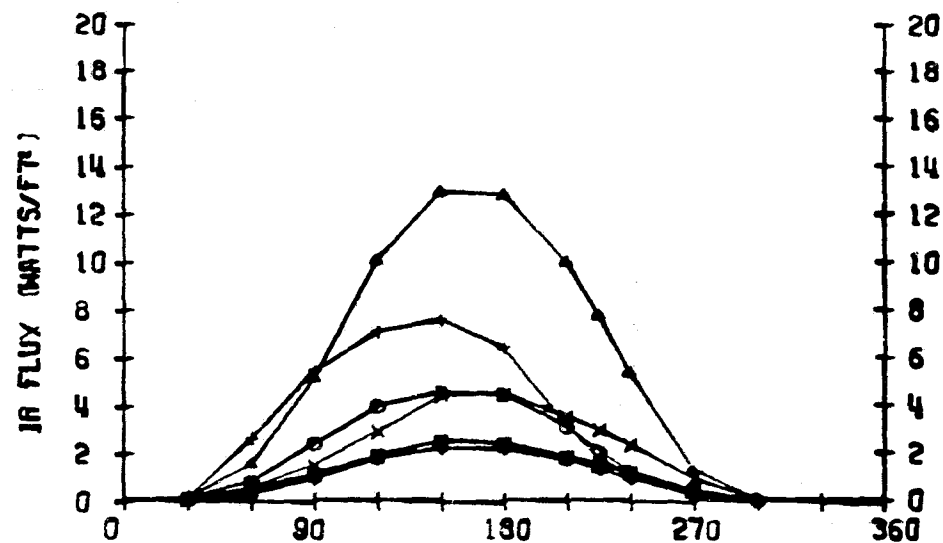


450 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



**ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)**

FOR

450 KM * BETA=60 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	4.8	4.2	3.4	6.0	6.5	8.1
R	+Y (○)	4.6	3.8	2.6	6.3	3.4	7.1
F	+Z (Δ)	0.1	0.1	0.1	1.3	0.8	3.0
L	-X (+)	4.4	4.0	3.5	5.6	3.3	5.9
U	-Y (X)	4.8	3.8	2.8	6.5	3.6	7.3
X	-Z (◇)	7.6	7.7	7.2	8.1	8.0	8.6

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

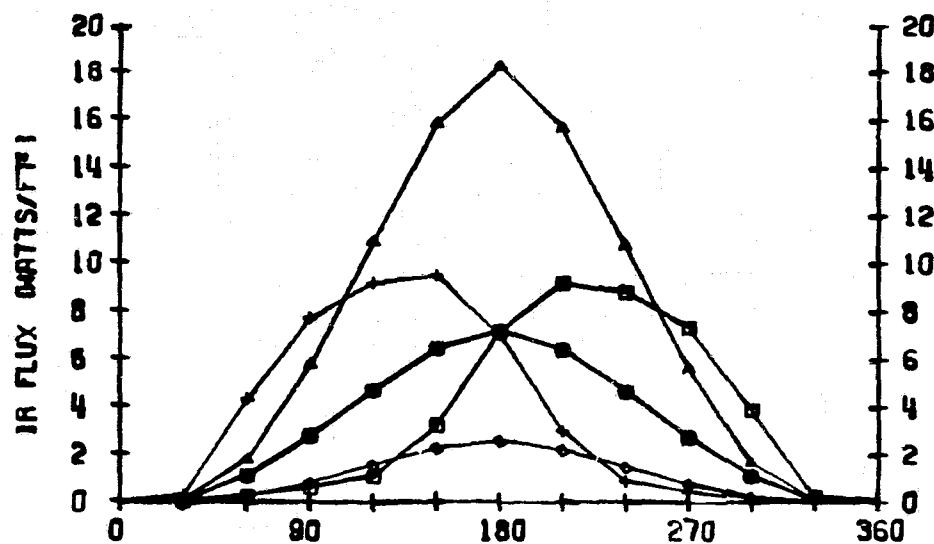
FOR

450 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

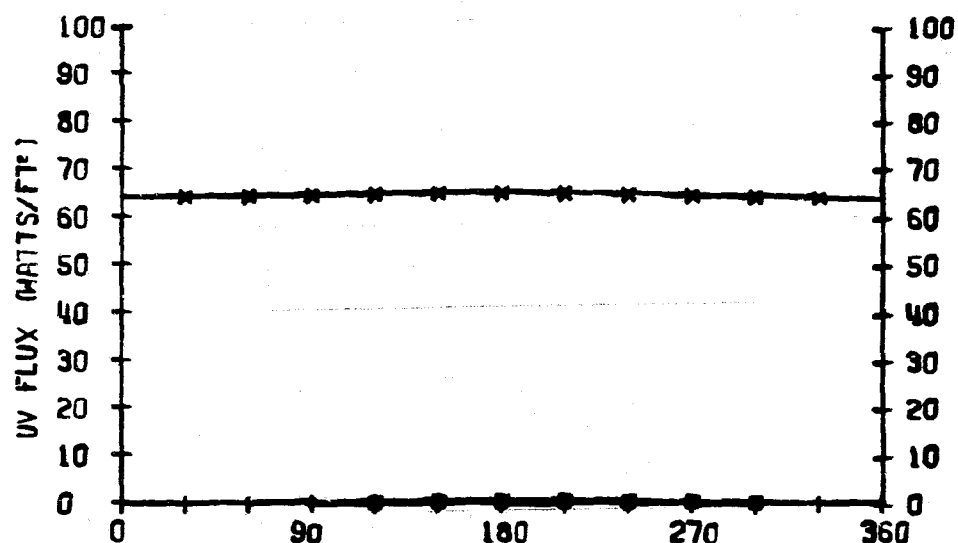
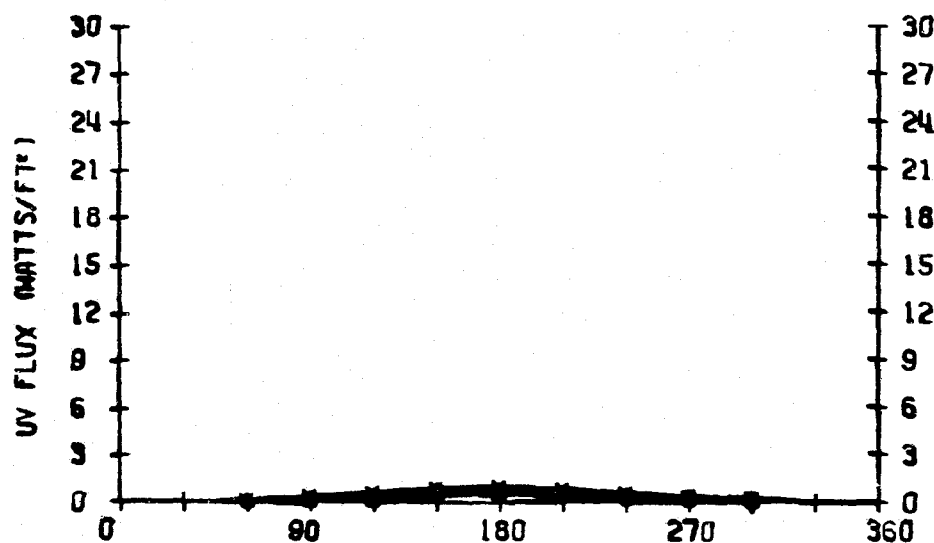
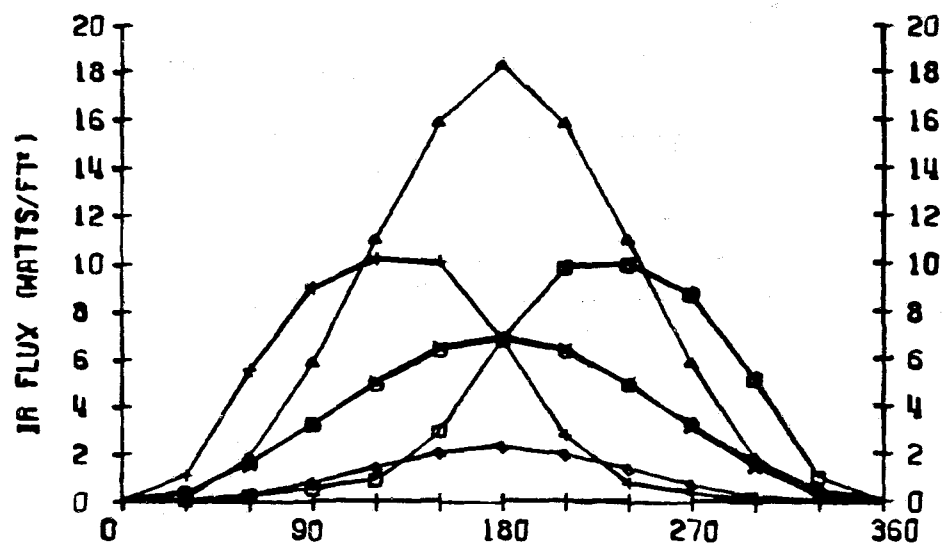
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.5	3.9	4.3	2.6	1.9	1.0
R	+Y (○)	3.1	3.4	3.8	2.2	3.3	1.7
F	+Z (Δ)	7.2	7.3	7.3	6.4	6.6	5.0
L	-X (+)	3.5	3.9	4.5	2.9	4.6	2.9
U	-Y (X)	3.1	3.3	3.8	2.2	3.3	1.7
X	-Z (◇)	1.0	0.9	1.0	1.1	0.8	0.9
U	+X (□)	0.2	0.3	0.3	0.2	0.2	0.2
V	+Y (○)	0.2	0.2	0.1	0.2	0.1	0.2
F	+Z (Δ)	0.3	0.3	0.3	0.3	0.3	0.2
L	-X (+)	0.2	0.3	0.3	0.2	0.3	0.2
U	-Y (X)	0.4	64.6	125.0	0.2	125.0	0.2
X	-Z (◇)	0.2	0.3	0.2	0.2	0.2	0.1

450 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

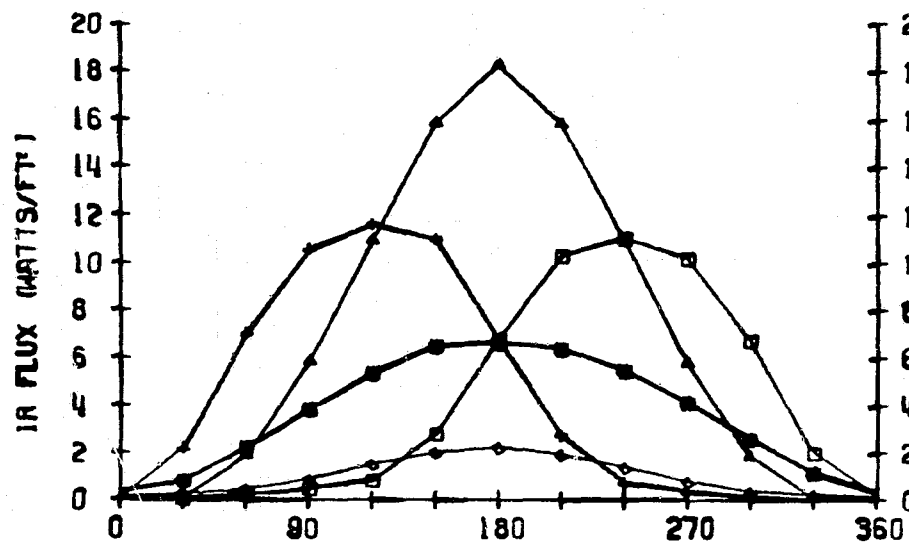


ORBIT POSITION (DEG)

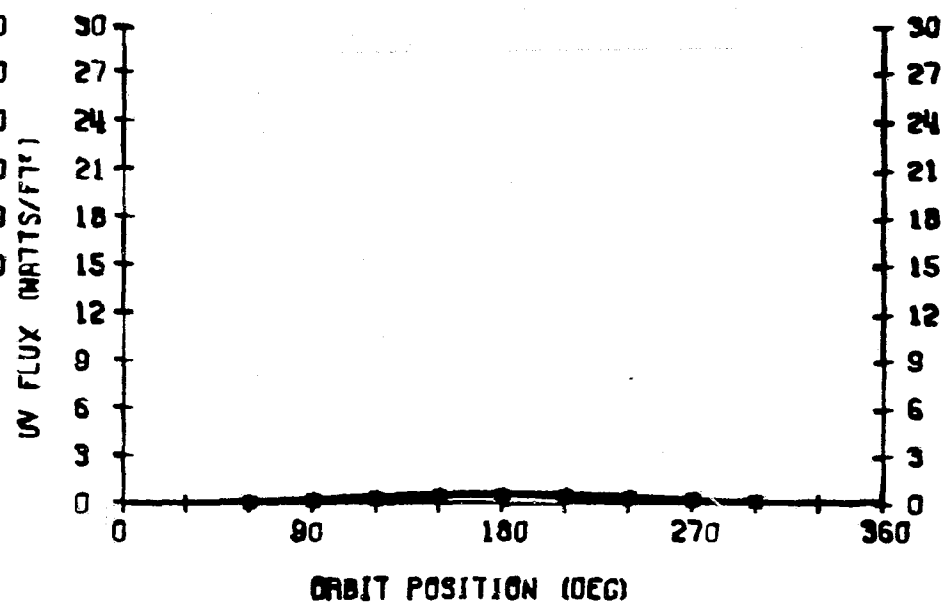
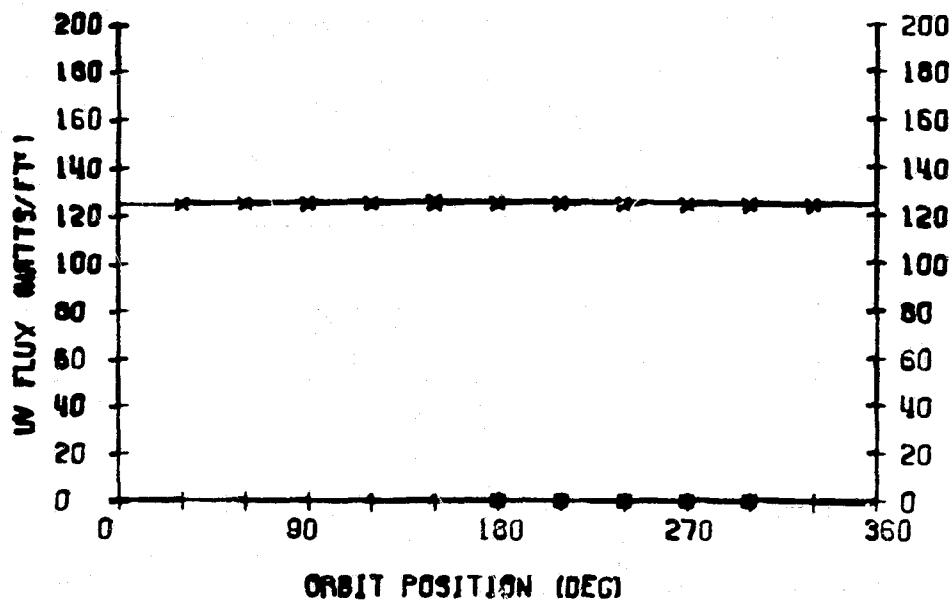
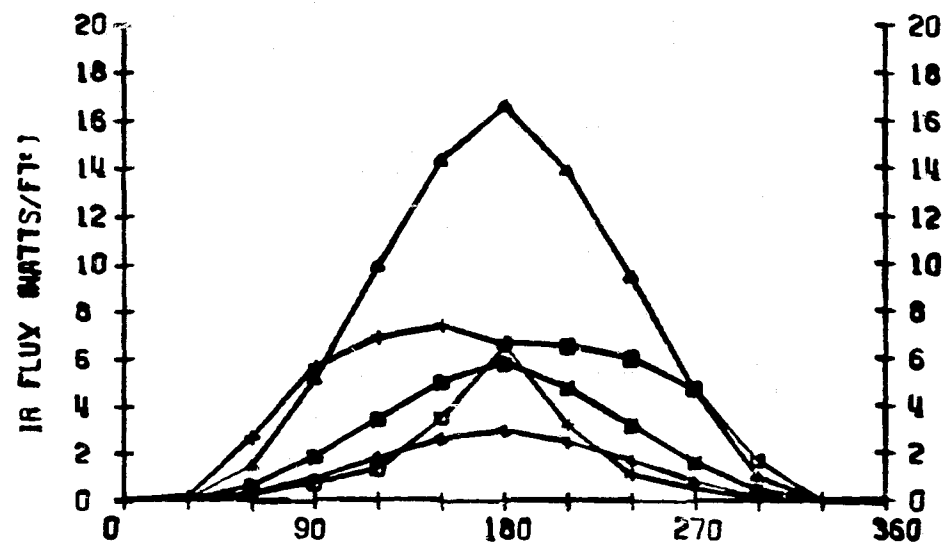
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

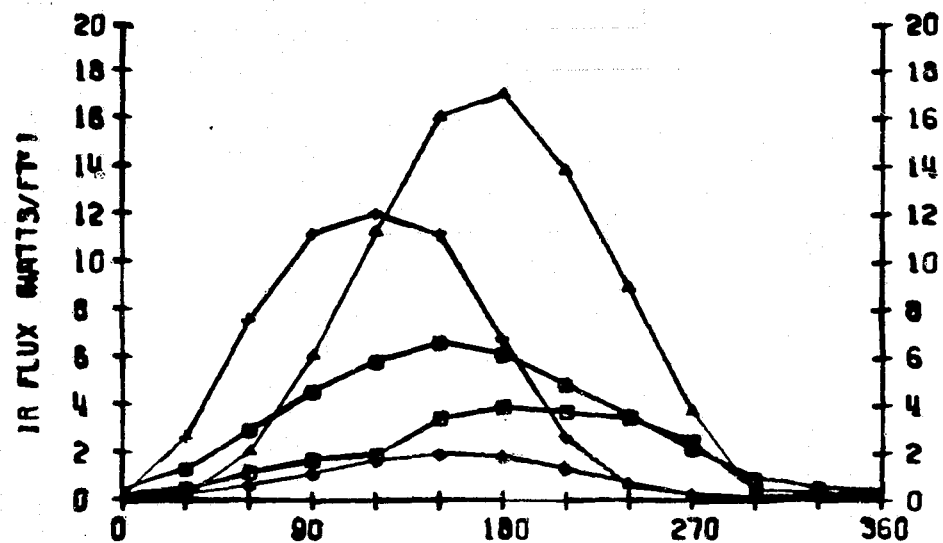


LOCATION 4

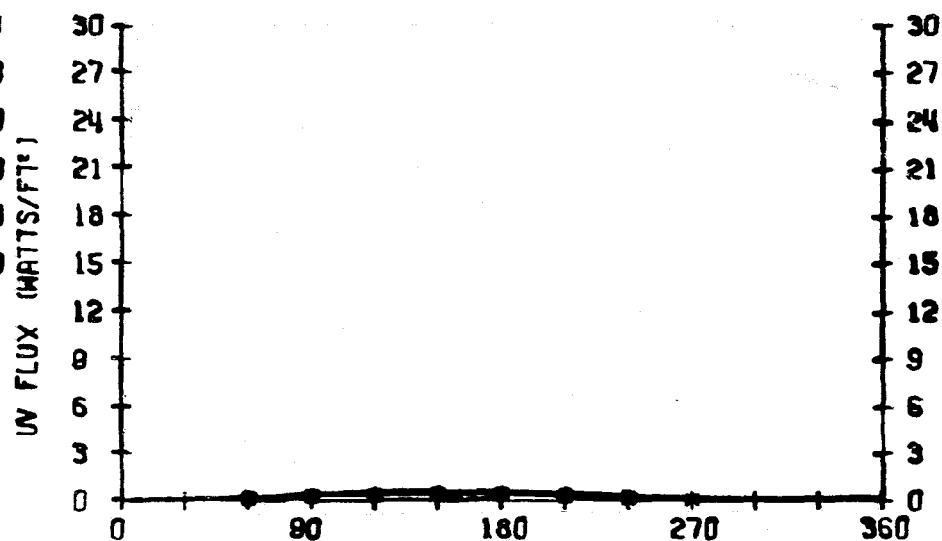
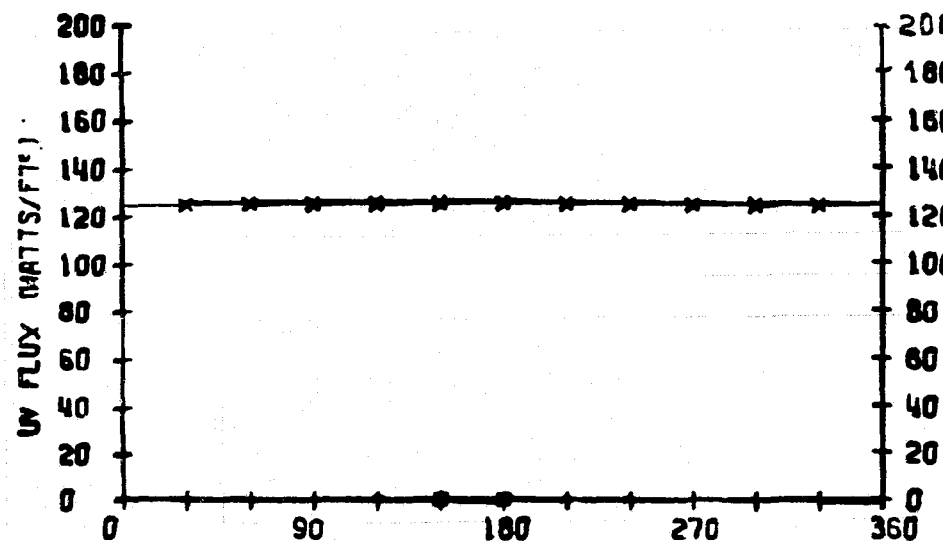
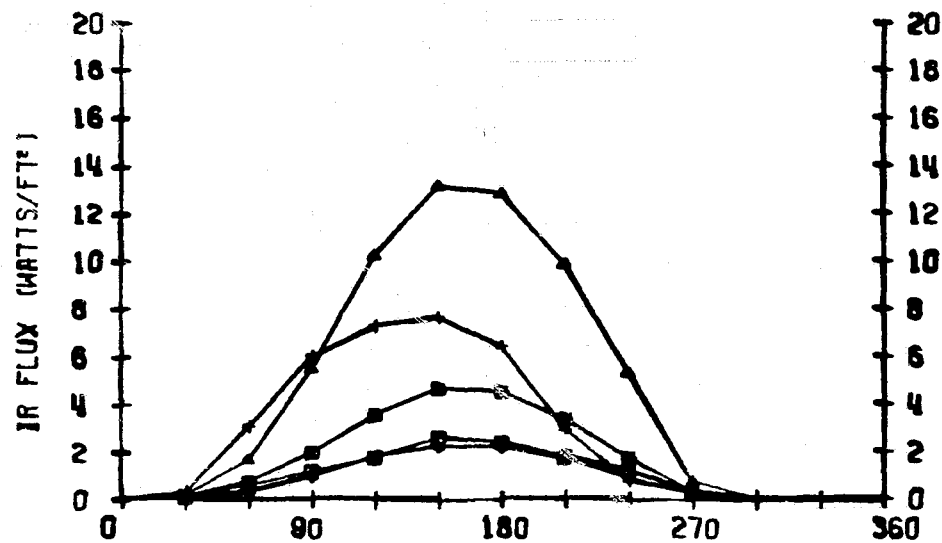


450 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	4.3	3.8	3.0	5.4	5.7	7.0
R	+Y (○)	4.2	3.5	2.4	5.8	3.0	6.2
F	+Z (△)	0.1	0.1	0.1	1.2	0.7	2.6
L	-X (+)	4.1	3.7	3.2	5.1	2.9	5.1
U	-Y (X)	4.3	3.4	2.5	5.8	3.1	6.3
X	-Z (◇)	6.9	7.0	6.5	7.4	7.0	7.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

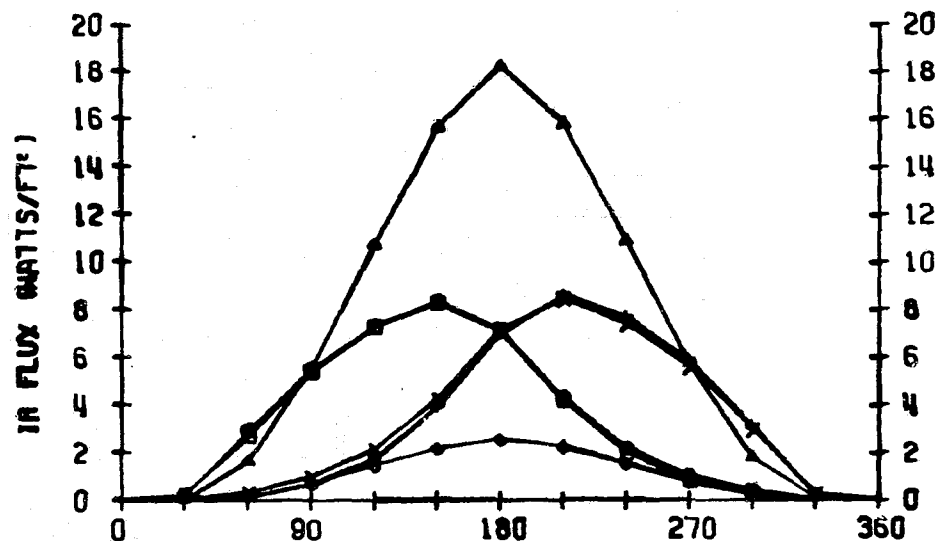
FOR

450 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

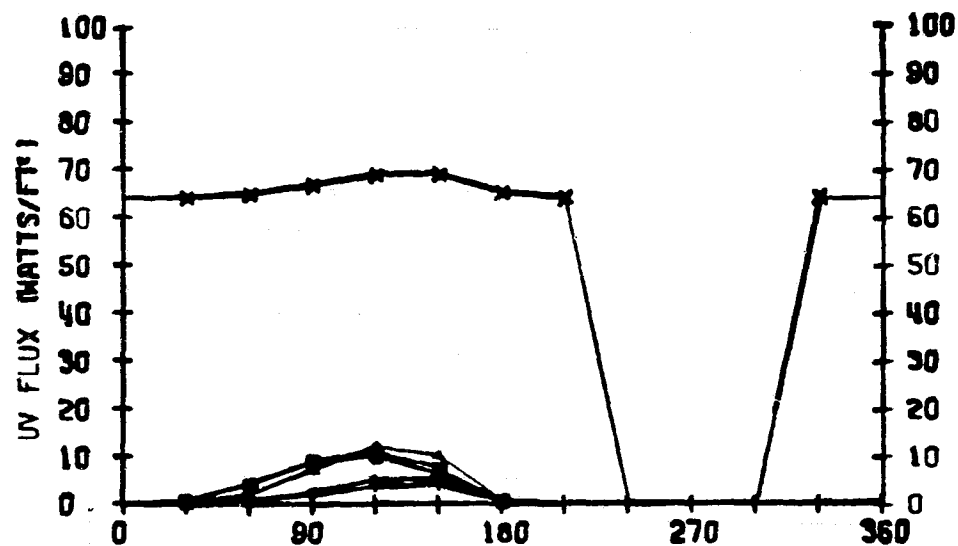
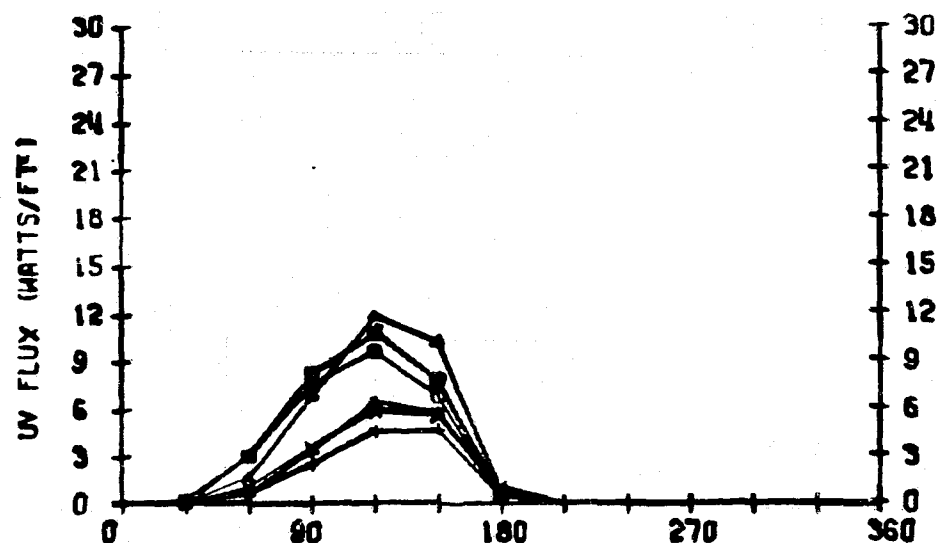
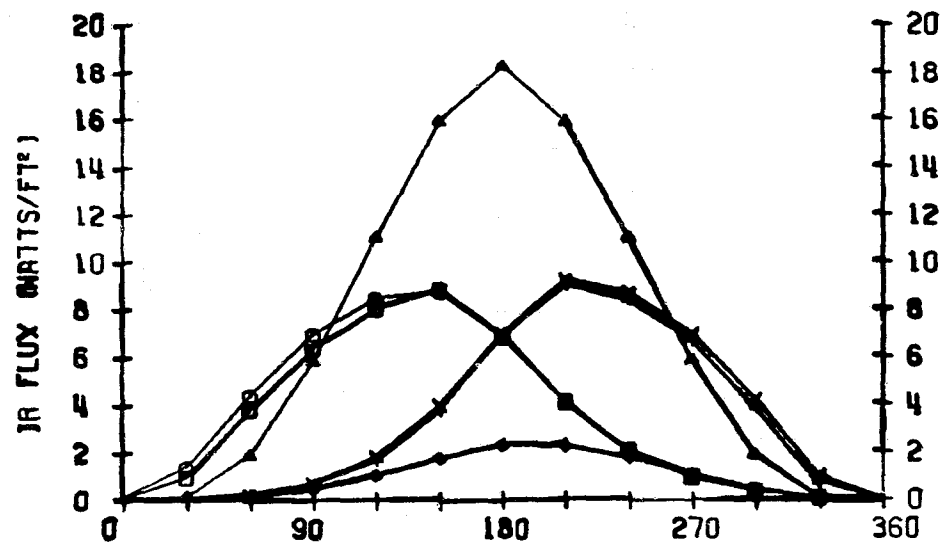
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.2	3.5	3.8	2.5	2.0	1.0
R	+Y (○)	3.3	3.7	4.5	2.2	3.9	1.7
F	+Z (Δ)	7.2	7.3	7.3	6.2	6.7	4.9
L	-X (+)	3.3	3.5	4.0	2.7	4.1	2.7
U	-Y (x)	3.3	3.6	4.4	2.2	4.4	1.8
X	-Z (◇)	1.0	0.9	1.1	1.1	0.9	0.8
U	+X (□)	2.5	2.7	2.9	2.1	1.2	0.8
V	+Y (○)	2.3	2.5	3.2	1.6	2.5	1.1
F	+Z (Δ)	2.6	2.7	2.7	2.3	2.2	1.5
L	-X (+)	1.1	1.0	1.0	1.2	0.9	1.0
U	-Y (x)	1.4	43.9	84.0	1.6	83.7	1.0
X	-Z (◇)	1.4	1.1	1.4	1.5	0.9	0.9

450 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

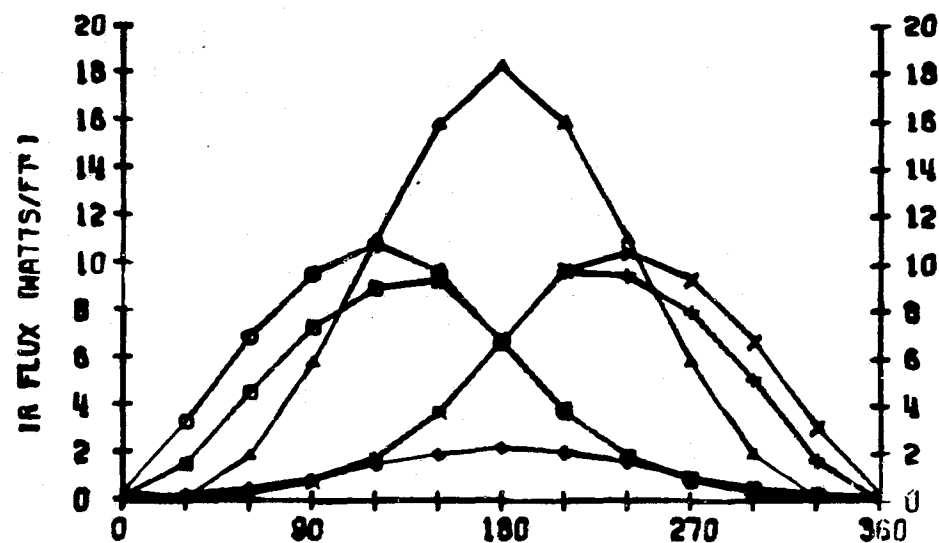


ORBIT POSITION (DEG)

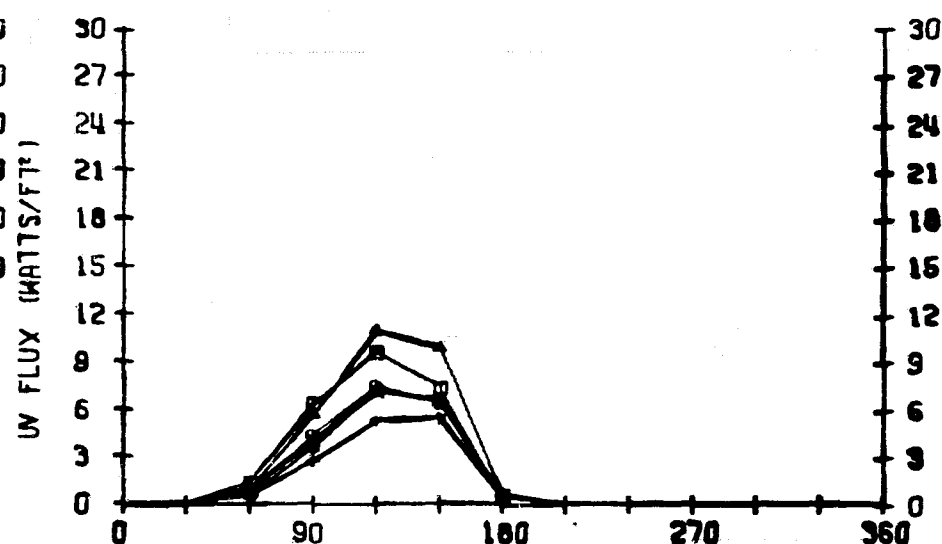
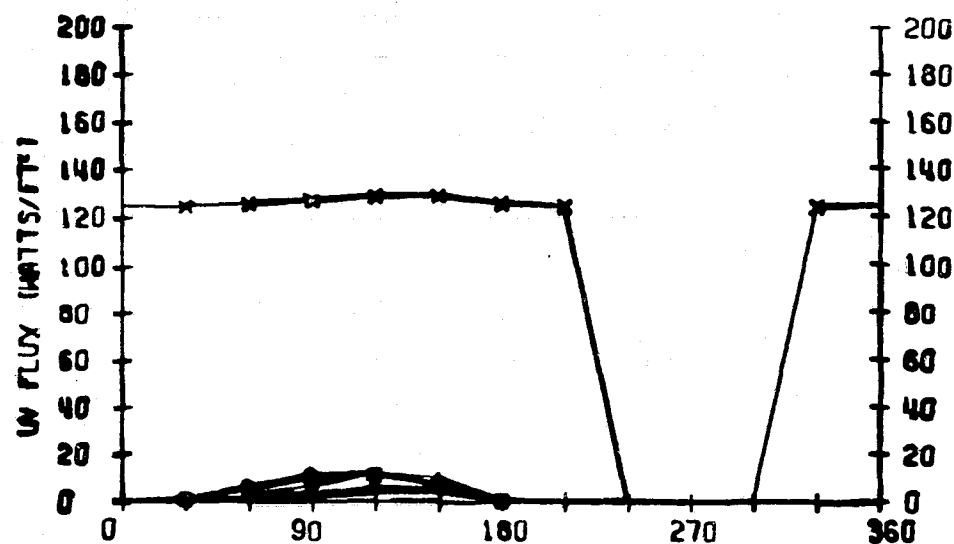
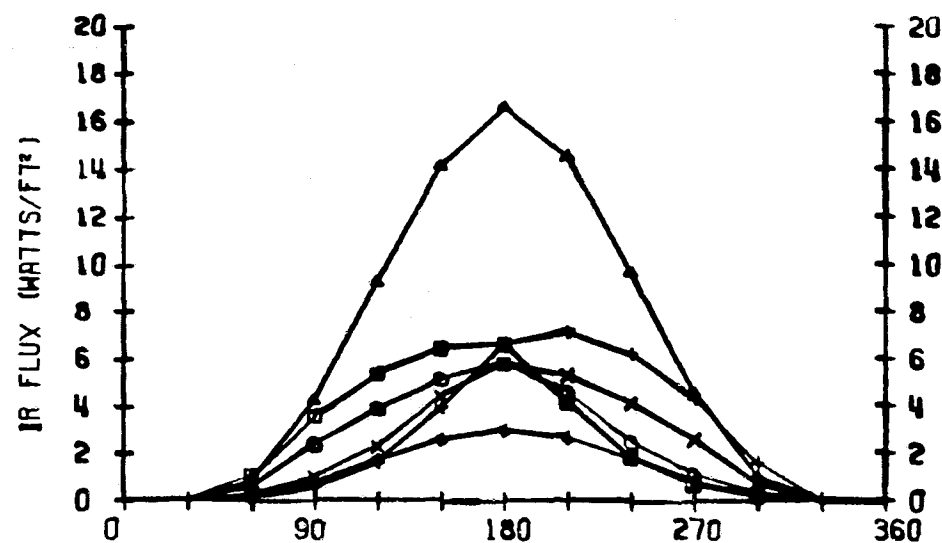
ORBIT POSITION (DEG)

450 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4



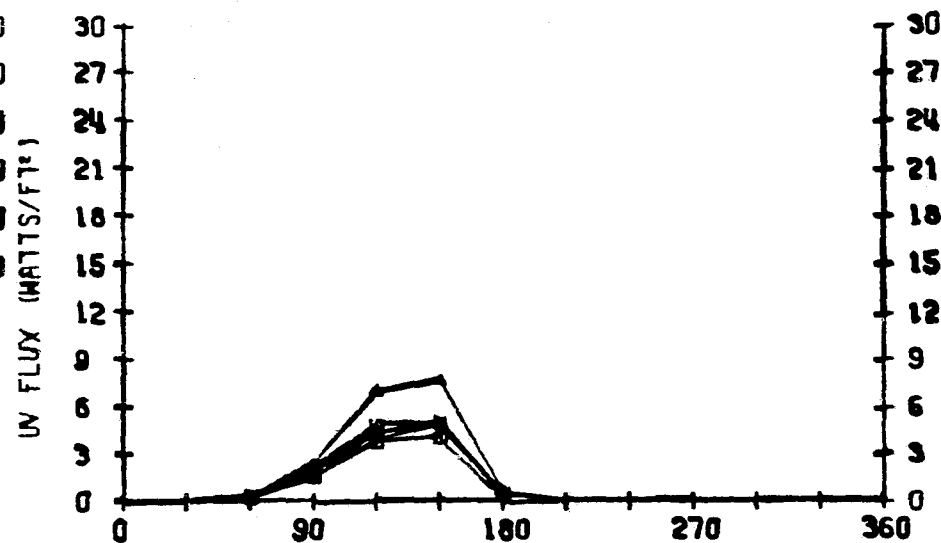
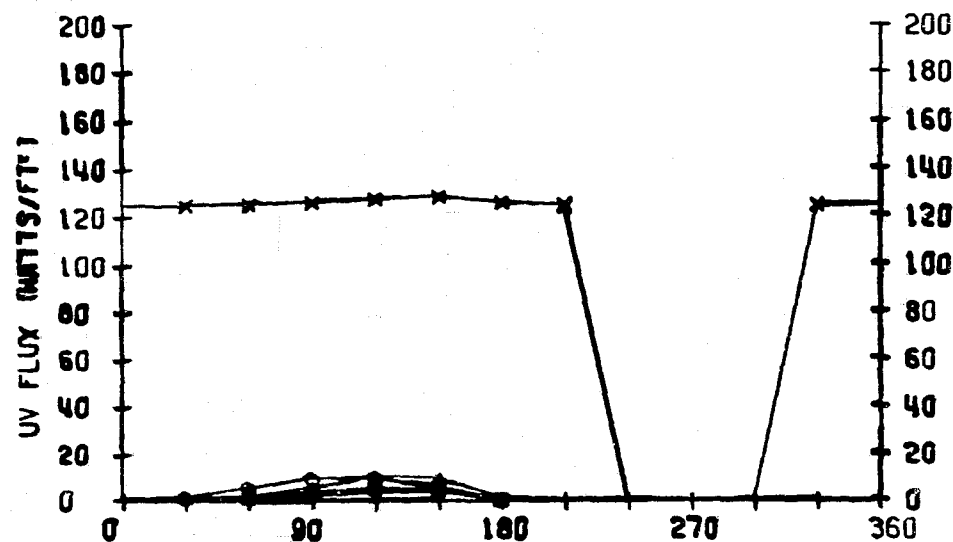
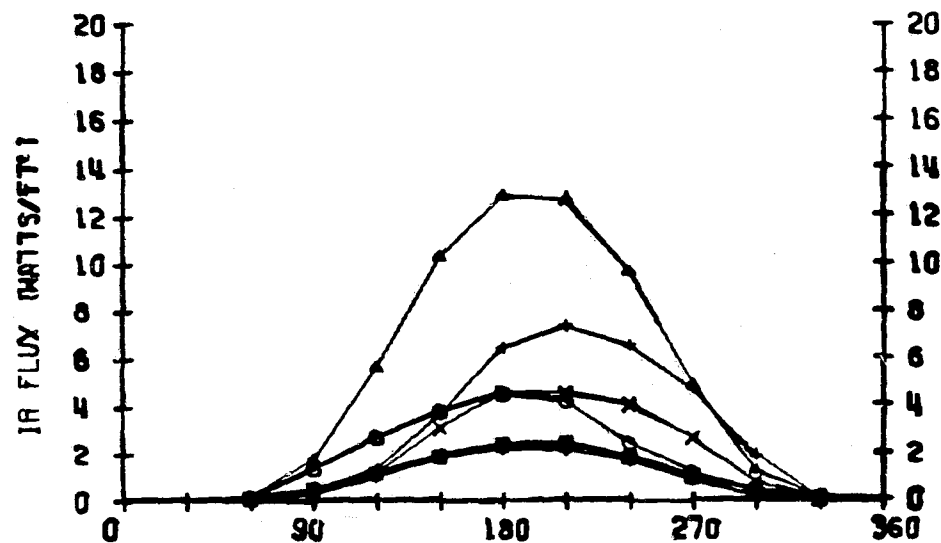
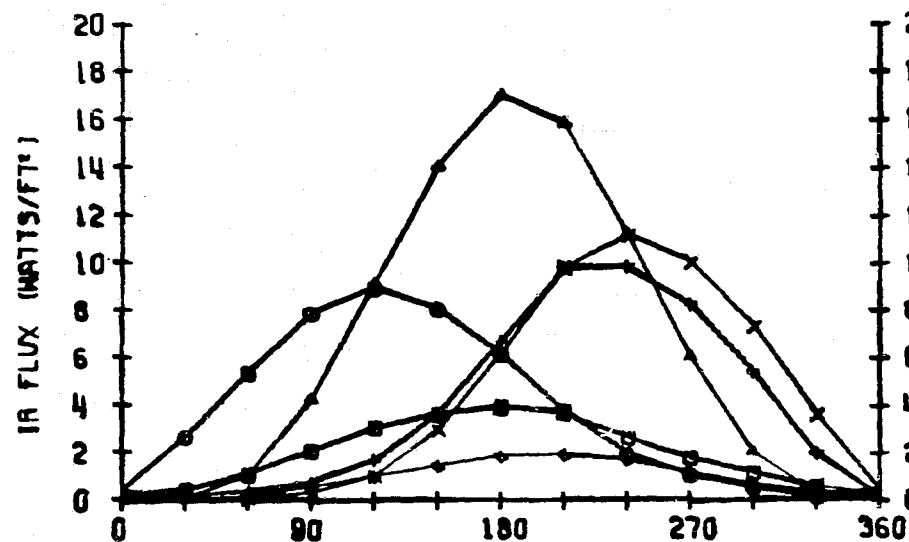
Orbit Position (Deg)

Orbit Position (Deg)

450 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5

LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=-45 DEG * -Y SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	4.8	4.2	3.4	6.1	5.8	7.4
R	+Y (○)	4.7	4.0	2.7	6.5	3.2	6.7
F	+Z (△)	0.1	0.1	0.1	1.3	0.7	2.8
L	-X (+)	4.8	4.3	3.8	5.9	3.3	5.7
U	-Y (×)	5.0	4.0	2.9	6.7	3.3	6.8
X	-Z (◇)	7.8	8.0	7.5	8.3	7.5	8.0

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 6

Bottom to sun, tail facing north ecliptic pole

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

FOR

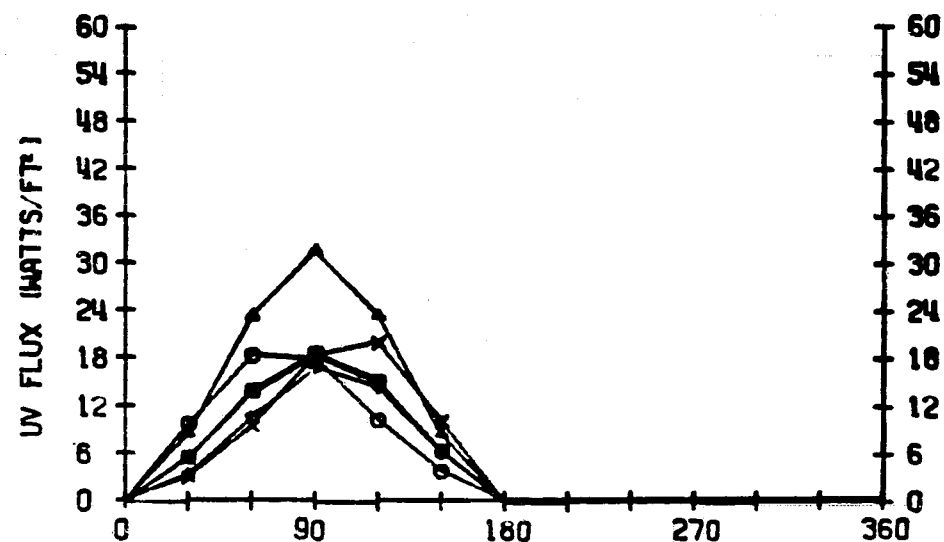
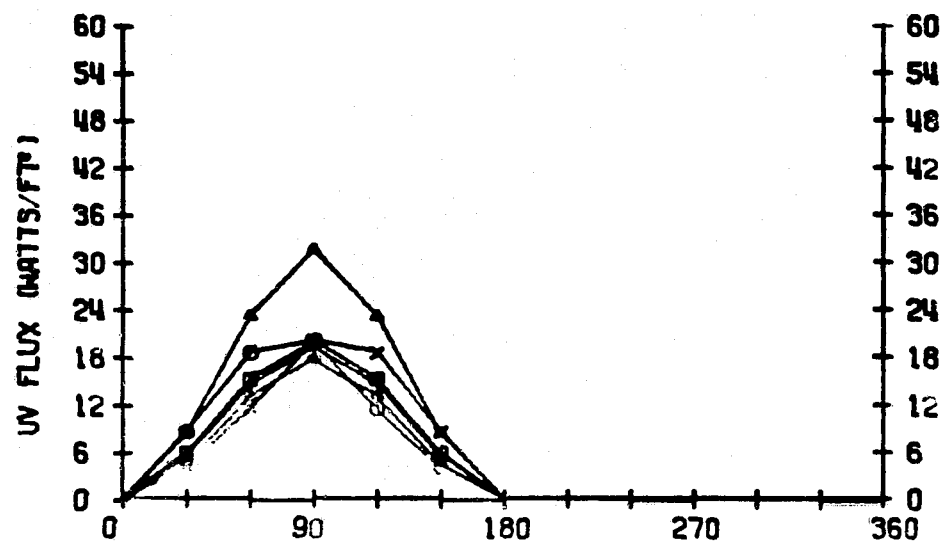
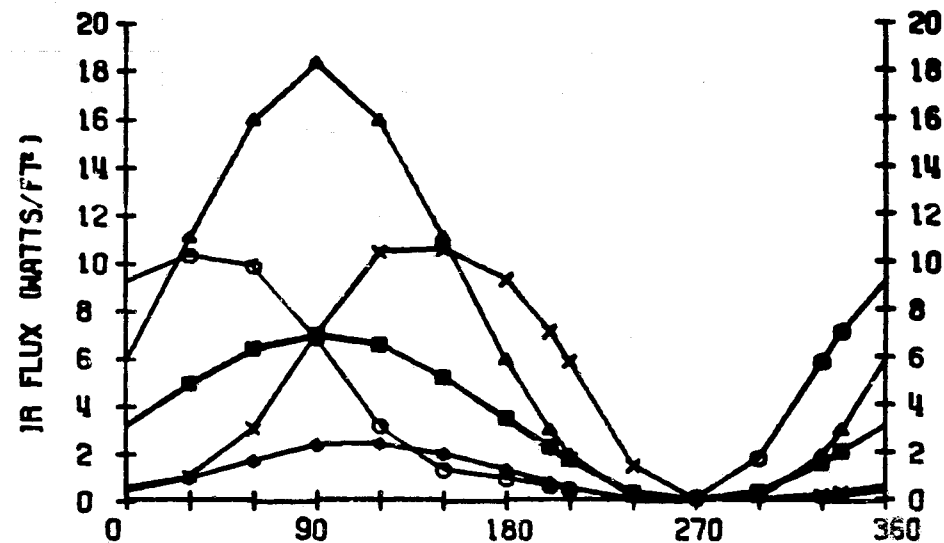
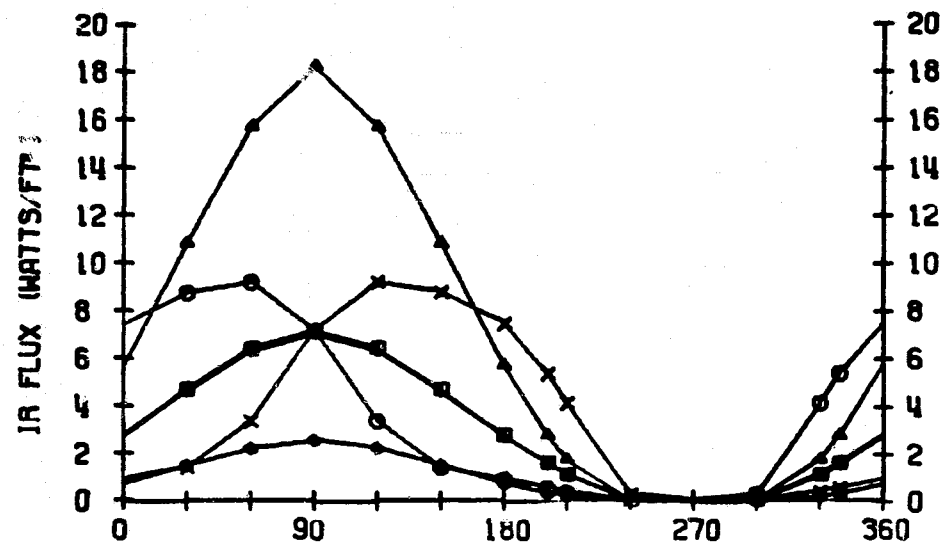
450 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.4	3.9	2.4	2.1	0.9
R	+Y (○)	3.6	4.1	5.2	2.2	4.8	1.7
F	+Z (Δ)	7.2	7.3	7.3	6.1	6.8	4.8
L	-X (+)	3.1	3.4	3.7	2.4	3.9	2.3
U	-Y (×)	3.6	4.1	5.2	2.2	4.8	1.7
X	-Z (◇)	1.0	1.0	1.1	1.1	0.9	0.8
U	+X (□)	5.2	5.0	4.8	5.3	3.9	3.8
V	+Y (○)	5.2	5.0	4.9	5.1	4.7	4.4
F	+Z (Δ)	7.9	7.9	7.9	7.6	7.6	6.5
L	-X (+)	5.0	4.9	4.9	5.2	4.8	5.0
U	-Y (×)	5.2	5.1	5.0	5.1	4.7	4.4
X	-Z (◇)	4.4	4.3	4.1	5.0	3.7	4.2

450 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

LOCATION 2

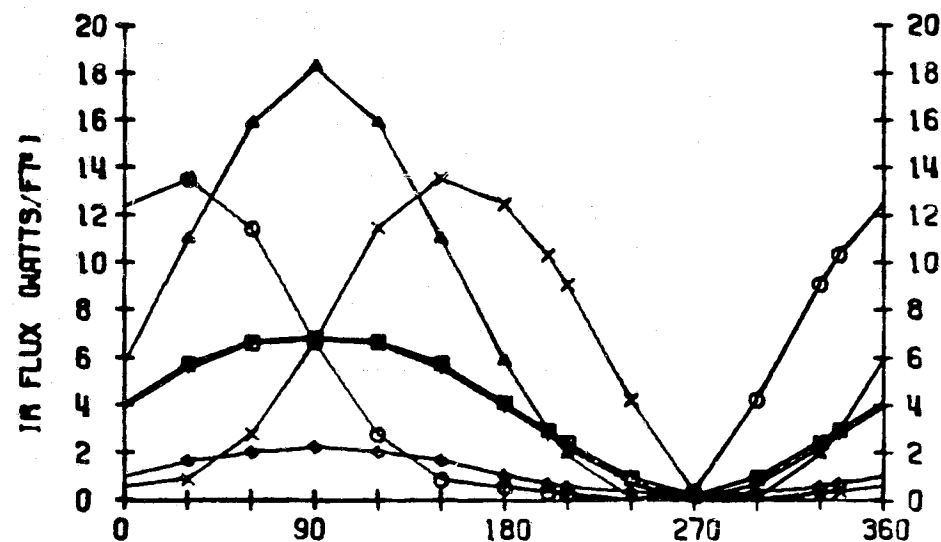


ORBIT POSITION (DEG)

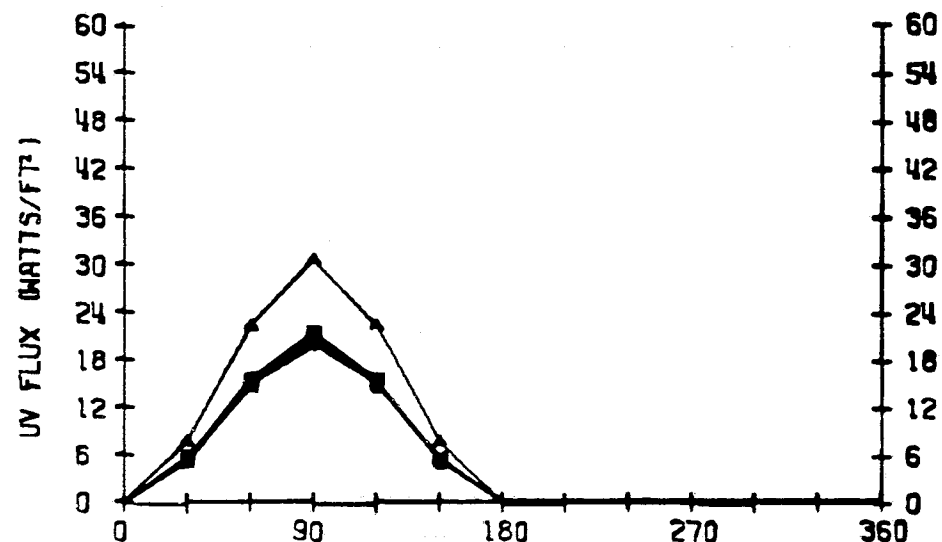
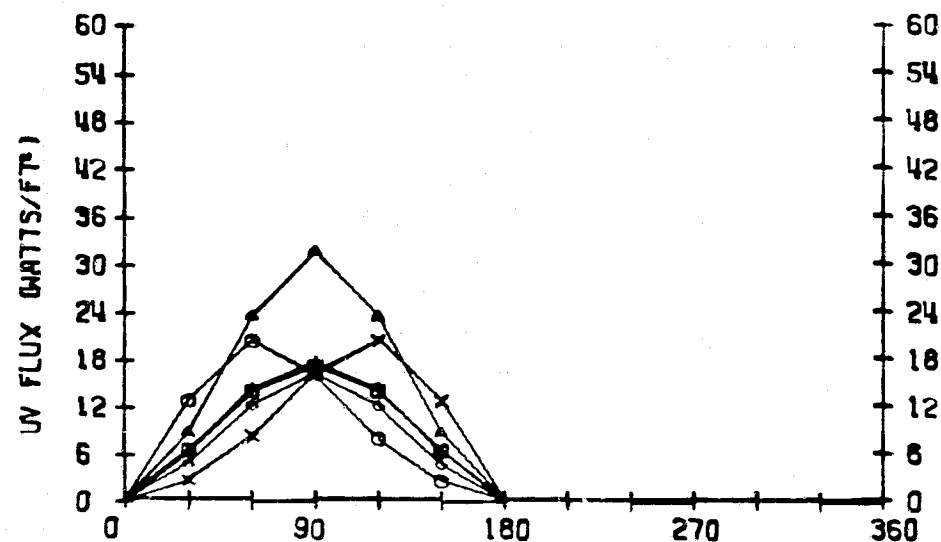
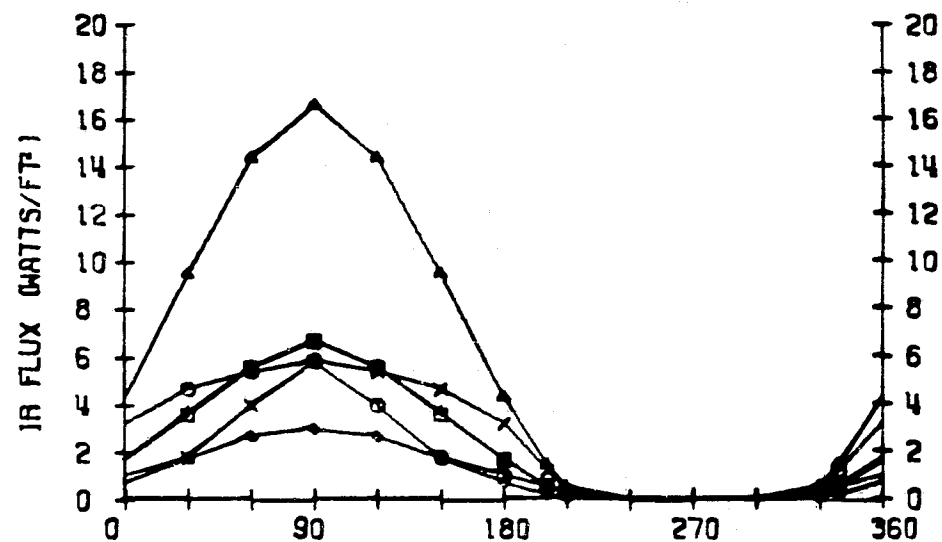
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

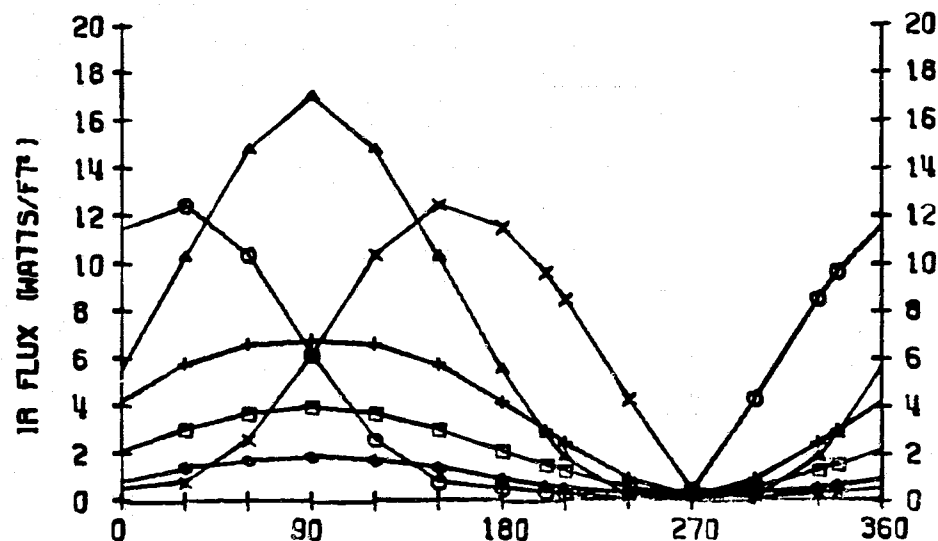


ORBIT POSITION (DEG)

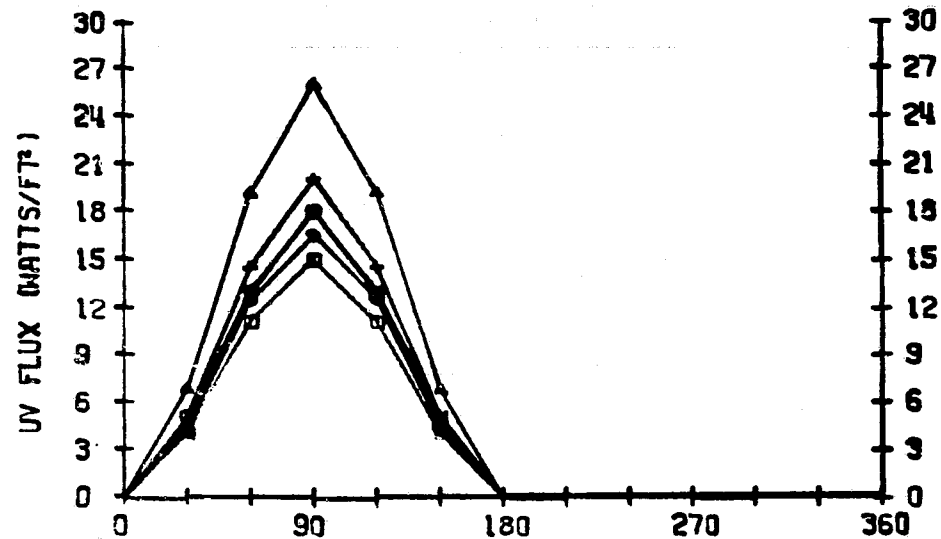
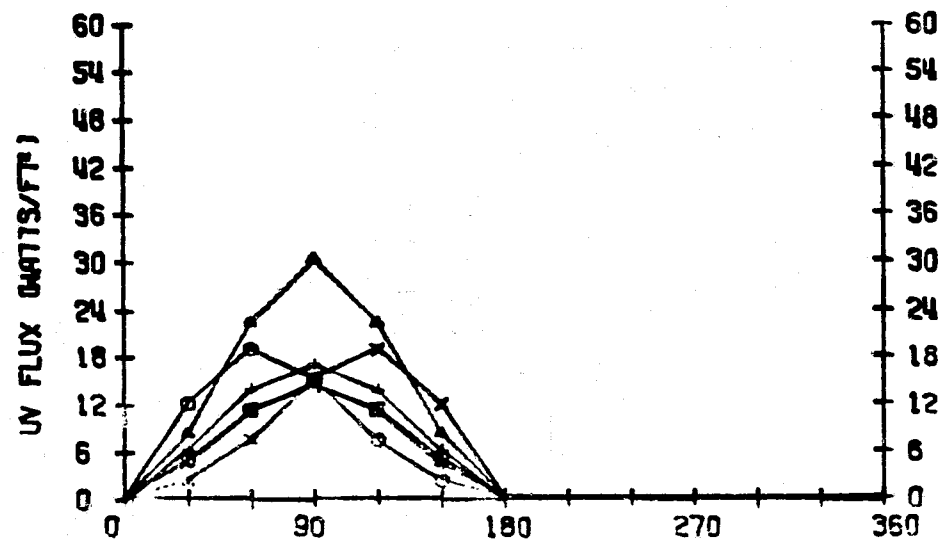
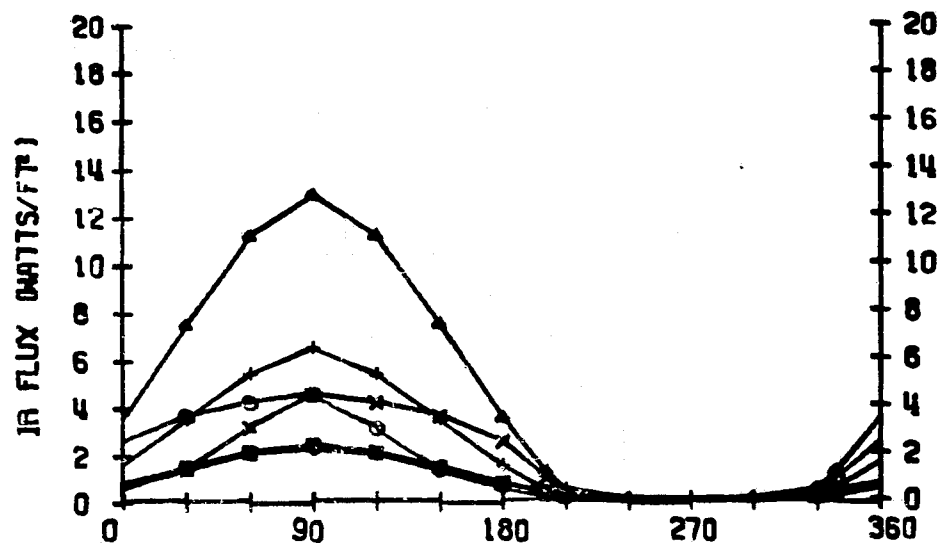
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	6.2	5.6	4.4	7.8	7.5	9.7
R	+Y (○)	6.3	5.4	3.6	8.6	4.3	9.0
F	+Z (△)	0.1	0.1	0.1	1.7	0.9	3.6
L	-X (+)	6.1	5.6	4.8	7.5	4.3	7.5
U	-Y (X)	6.2	5.0	3.6	8.4	4.2	8.9
X	-Z (◇)	10.0	10.5	9.6	10.7	9.9	10.7

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

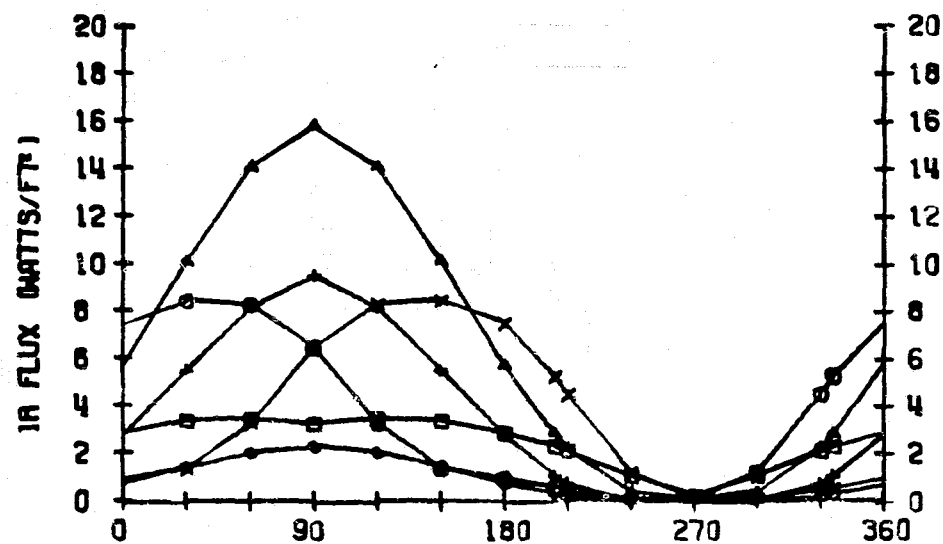
FOR

450 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

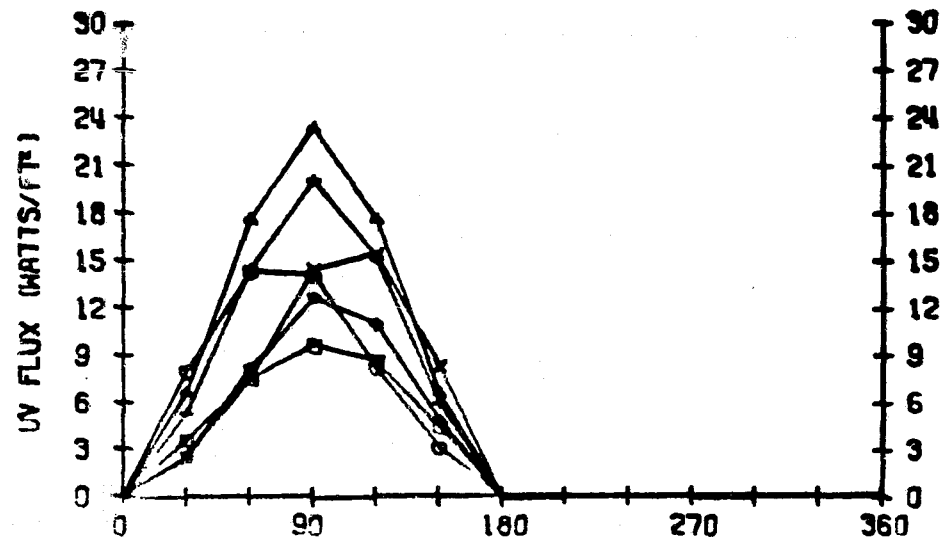
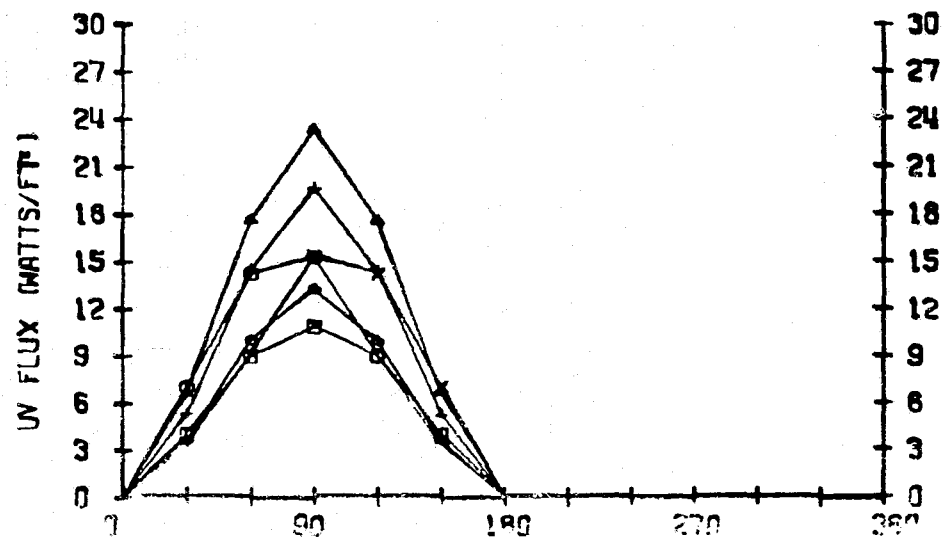
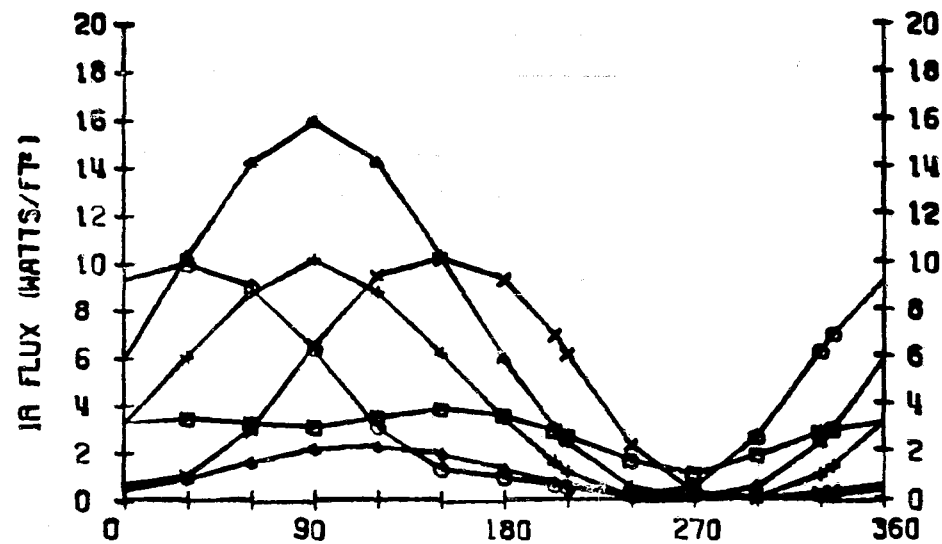
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	2.4	2.8	3.3	1.7	2.1	1.0
R	+Y (○)	3.5	4.1	5.2	2.1	4.9	1.8
F	+Z (Δ)	6.7	6.8	6.8	5.6	6.7	5.0
L	-X (+)	3.7	4.1	4.6	2.8	4.8	2.9
U	-Y (x)	3.5	4.1	5.2	2.1	4.9	1.8
X	-Z (◇)	0.9	0.9	1.1	1.0	1.0	0.8
U	+X (□)	3.0	2.8	2.6	3.4	3.7	3.6
V	+Y (○)	4.1	4.0	4.0	3.9	4.3	4.0
F	+Z (Δ)	6.0	6.0	6.0	5.7	6.3	5.8
L	-X (+)	4.9	5.1	5.4	4.6	5.5	4.9
U	-Y (x)	4.1	4.0	4.0	3.9	4.3	4.0
X	-Z (◇)	3.3	3.3	3.2	3.7	3.4	3.7

450 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

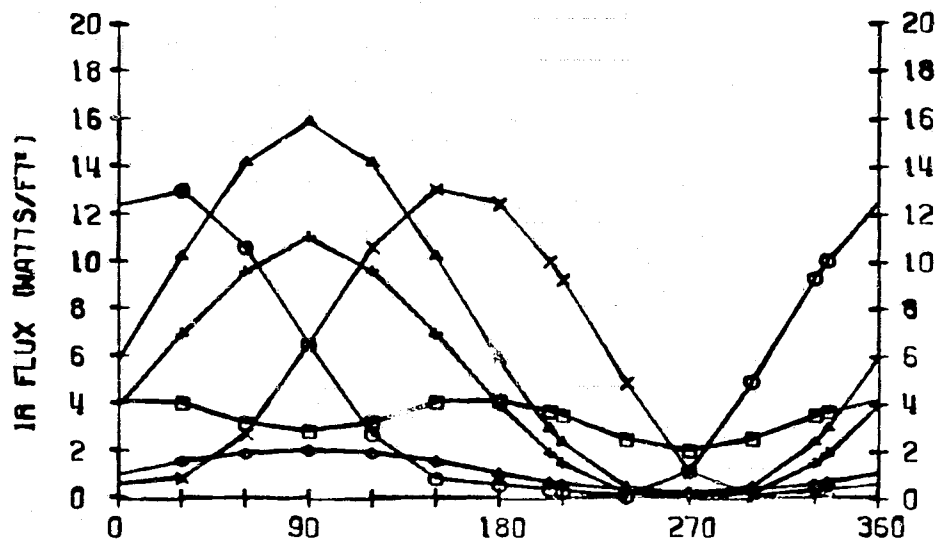


ORBIT POSITION (DEG)

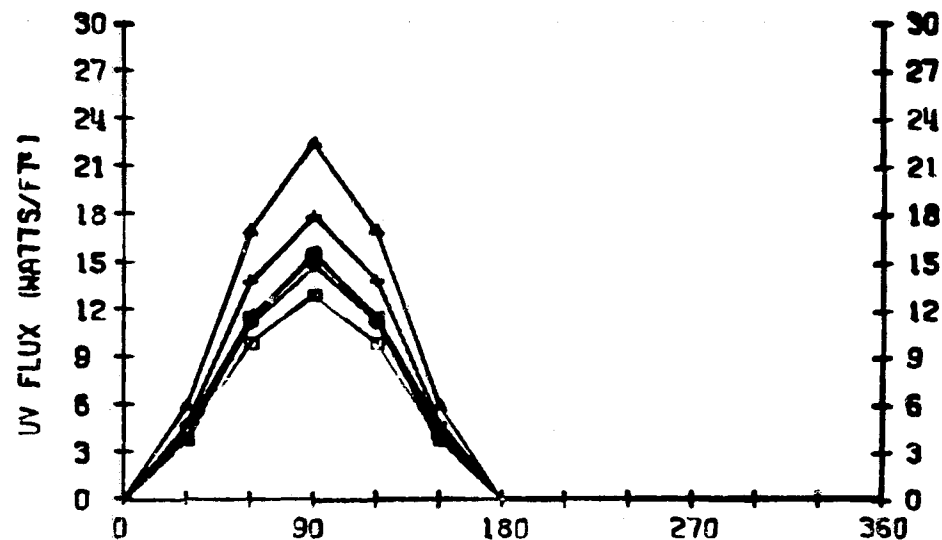
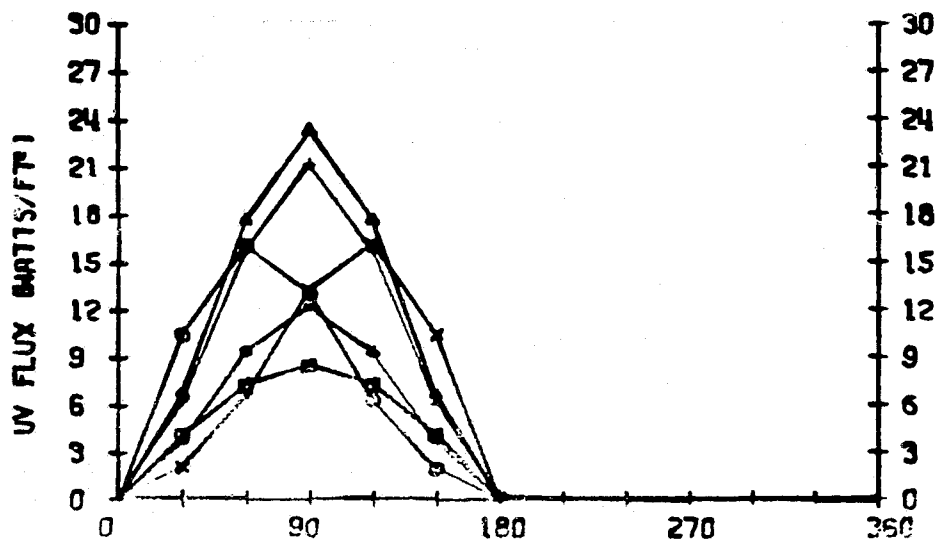
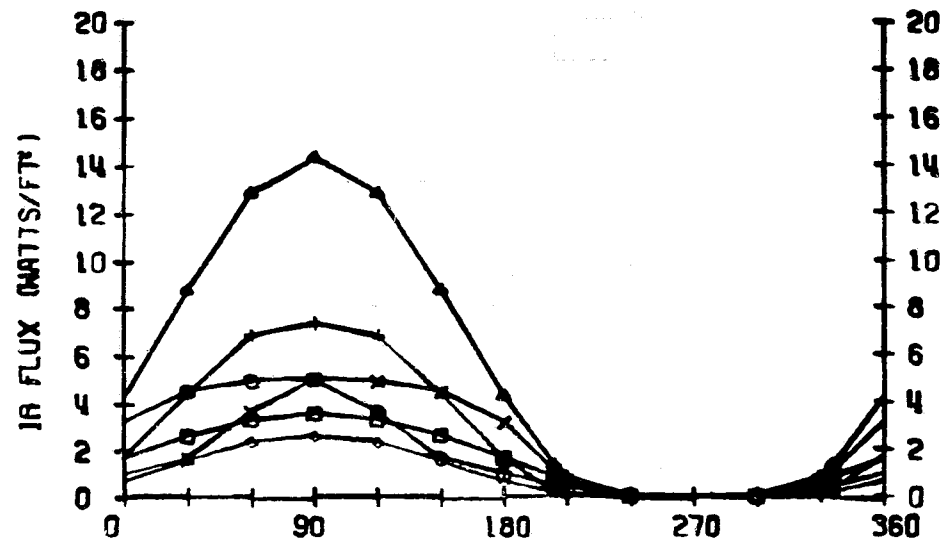
ORBIT POSITION (DEG)

450 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

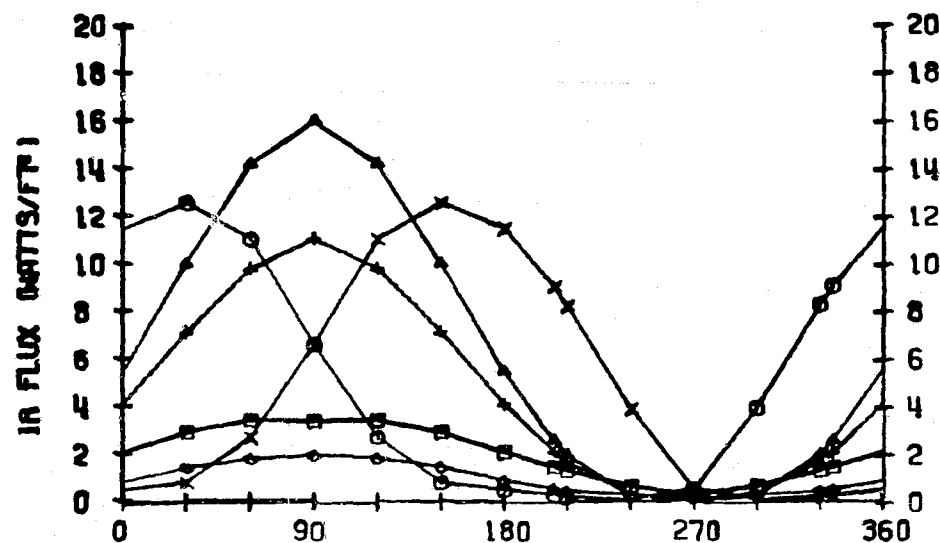


ORBIT POSITION (DEG)

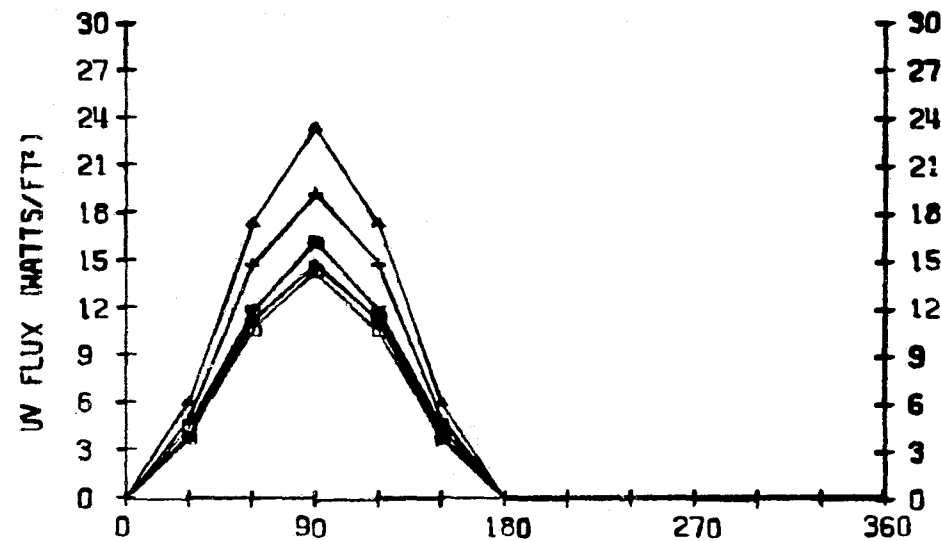
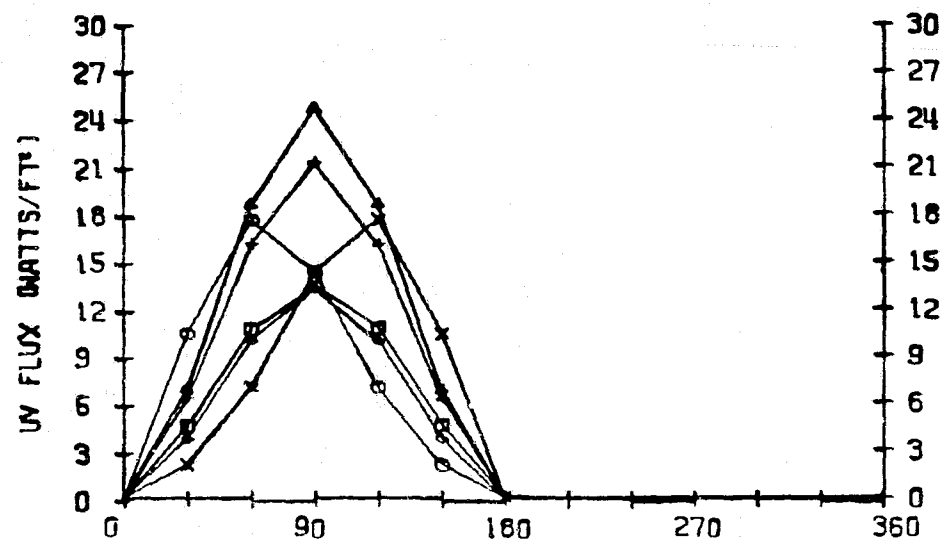
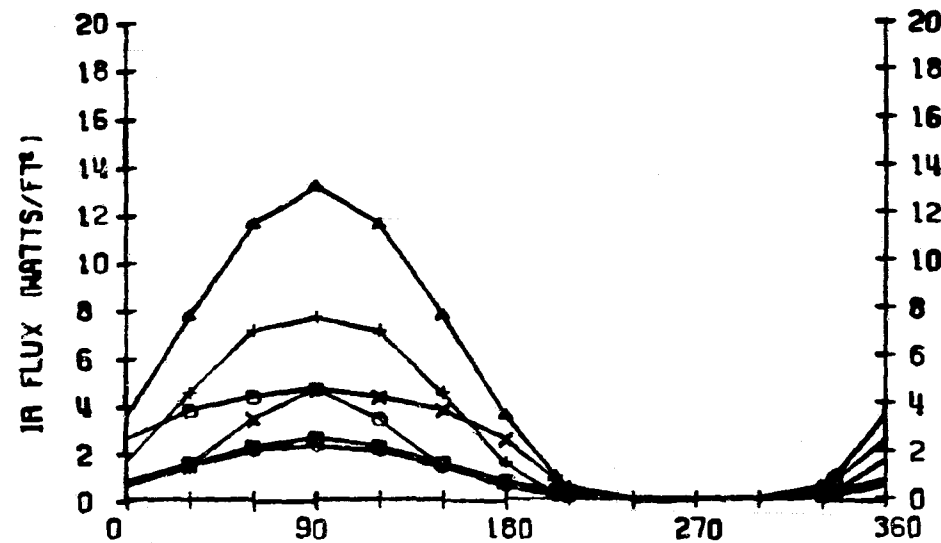
ORBIT POSITION (DEG)

450 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=30 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	5.7	5.2	4.1	7.0	7.9	10.0
R	+Y (○)	5.6	4.8	3.2	7.5	4.3	9.0
F	+Z (△)	0.1	0.1	0.1	1.5	1.0	3.7
L	-X (+)	5.2	4.8	4.0	6.4	3.9	7.2
U	-Y (X)	5.5	4.4	3.2	7.4	4.3	8.9
X	-Z (◇)	8.7	9.3	8.5	9.2	9.9	10.7

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

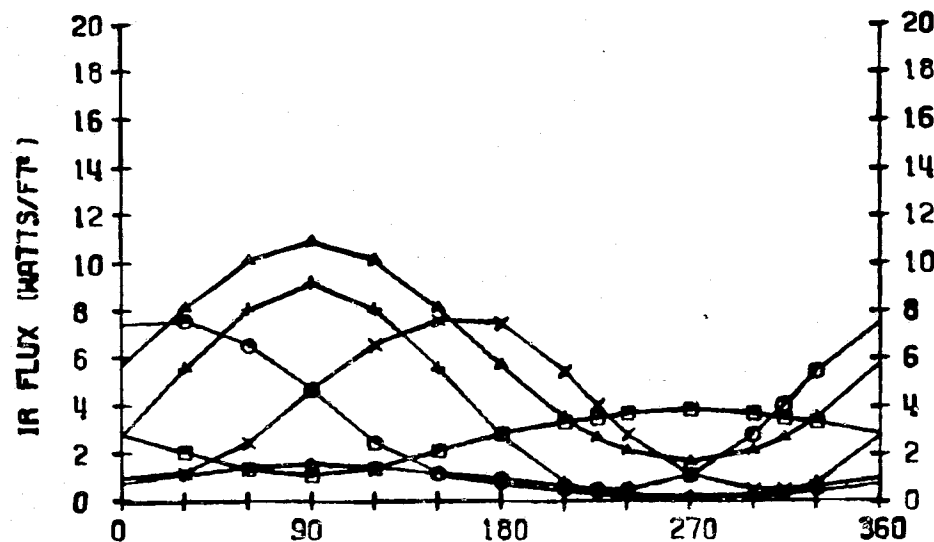
FOR

450 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

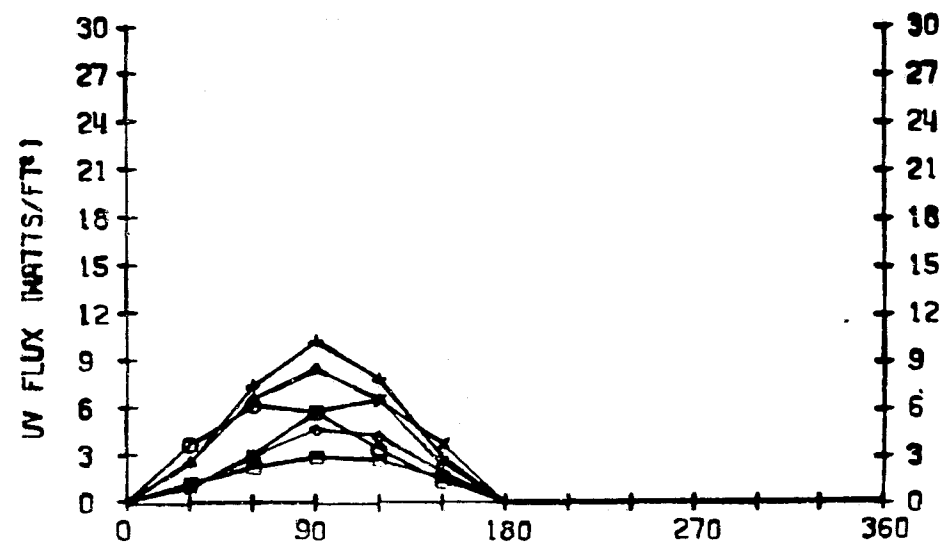
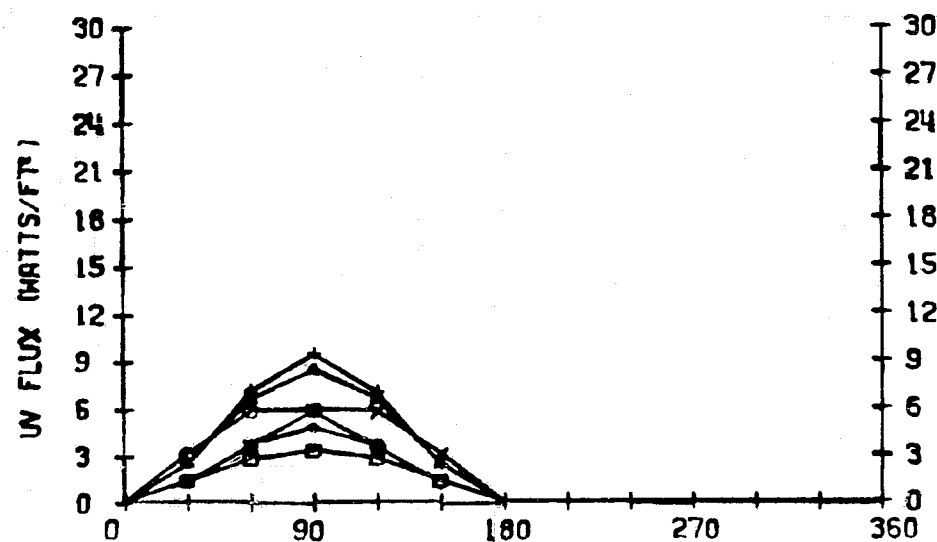
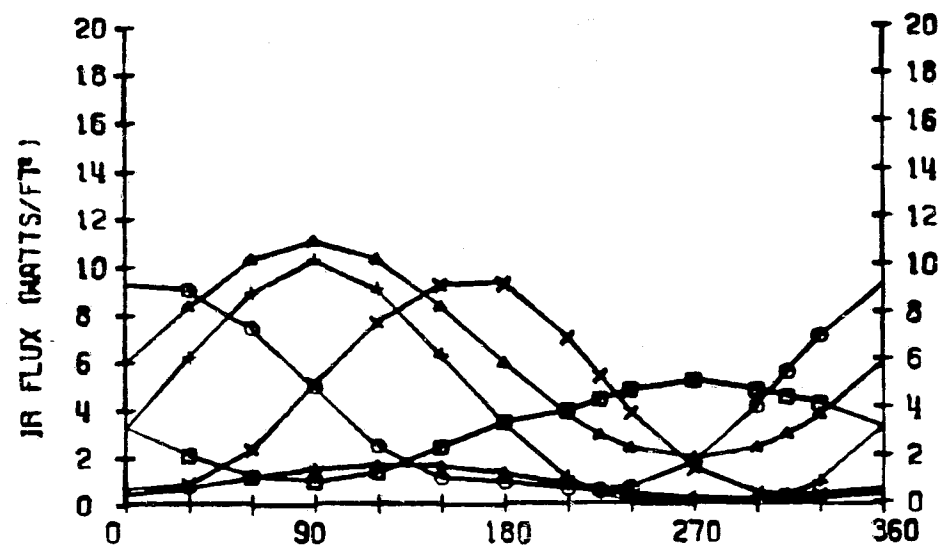
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	2.6	3.1	3.7	1.6	1.8	0.8
R	+Y (○)	3.4	4.1	5.2	1.9	4.8	1.6
F	+Z (△)	6.0	6.1	6.1	4.8	5.7	4.3
L	-X (+)	3.7	4.2	4.8	2.8	5.0	2.9
U	-Y (X)	3.4	4.0	5.2	1.9	4.8	1.6
X	-Z (◇)	0.8	0.8	1.0	0.8	0.9	0.7
U	+X (□)	1.0	0.9	0.8	1.1	1.8	1.6
V	+Y (○)	1.7	1.7	1.8	1.5	2.2	1.7
F	+Z (△)	2.2	2.2	2.2	2.0	2.4	2.5
L	-X (+)	2.4	2.6	2.9	2.1	3.1	2.4
U	-Y (X)	1.7	1.7	1.8	1.5	2.2	1.7
X	-Z (◇)	1.2	1.2	1.2	1.3	1.5	1.6

450 KM * BETA=60 DEG * -Z SOLAR INERTIAL * *X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2



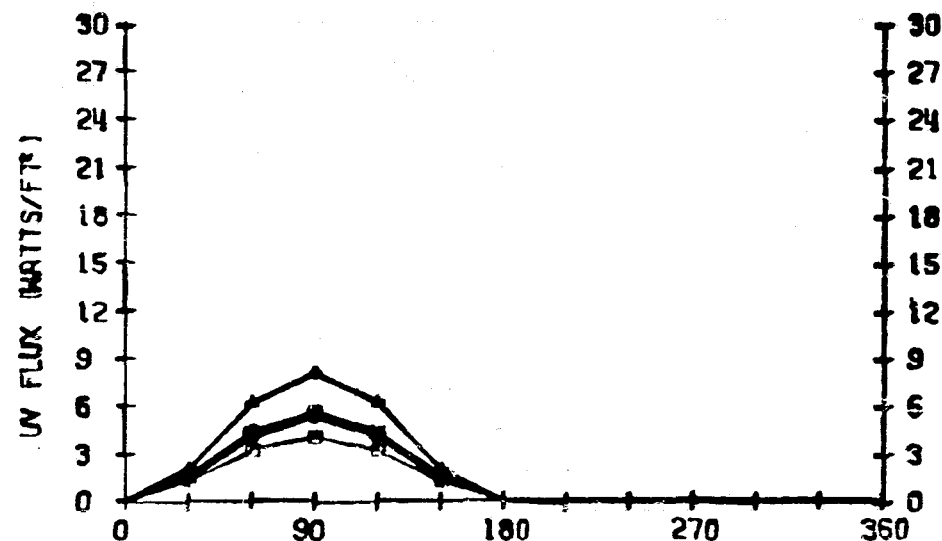
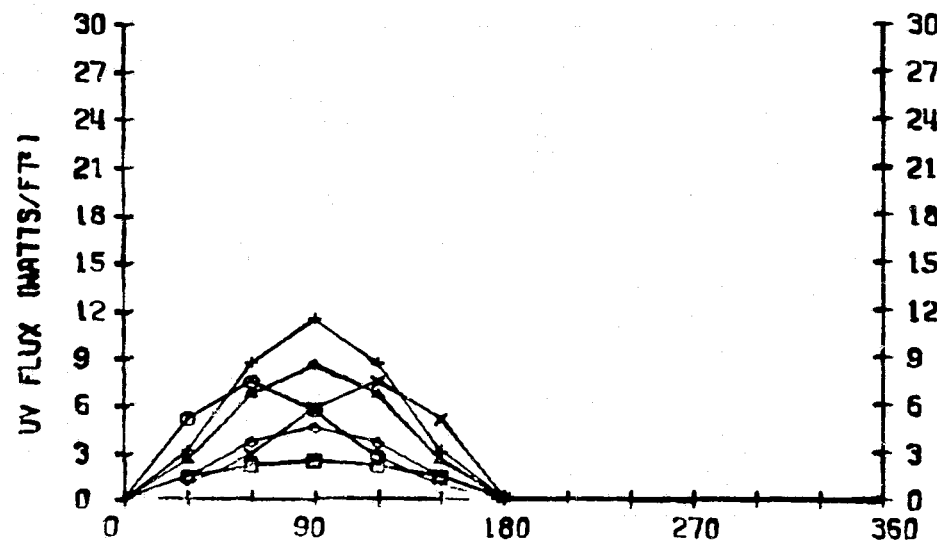
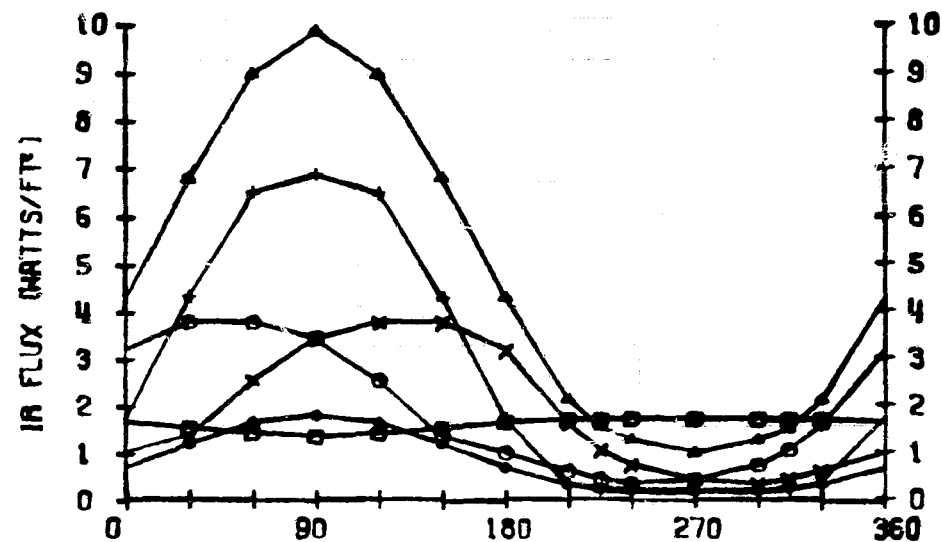
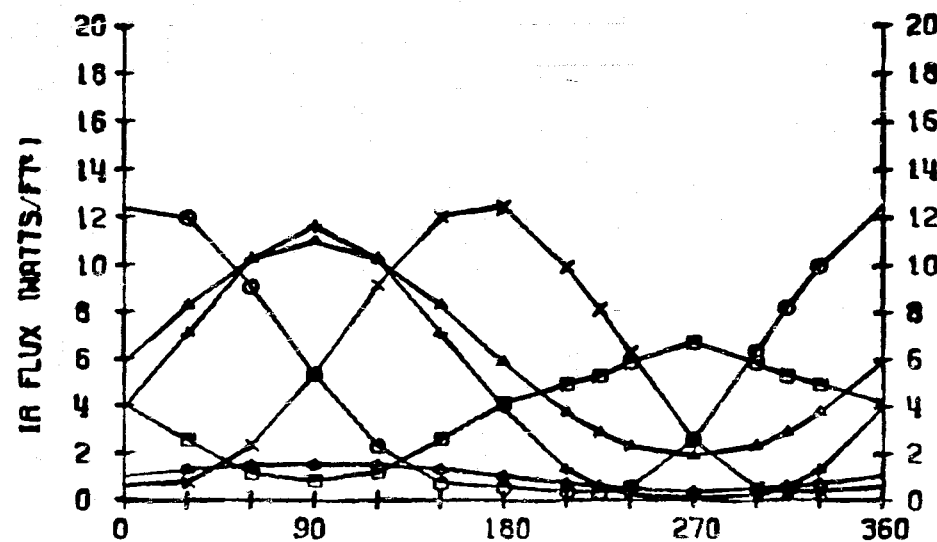
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

450 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

LOCATION 4

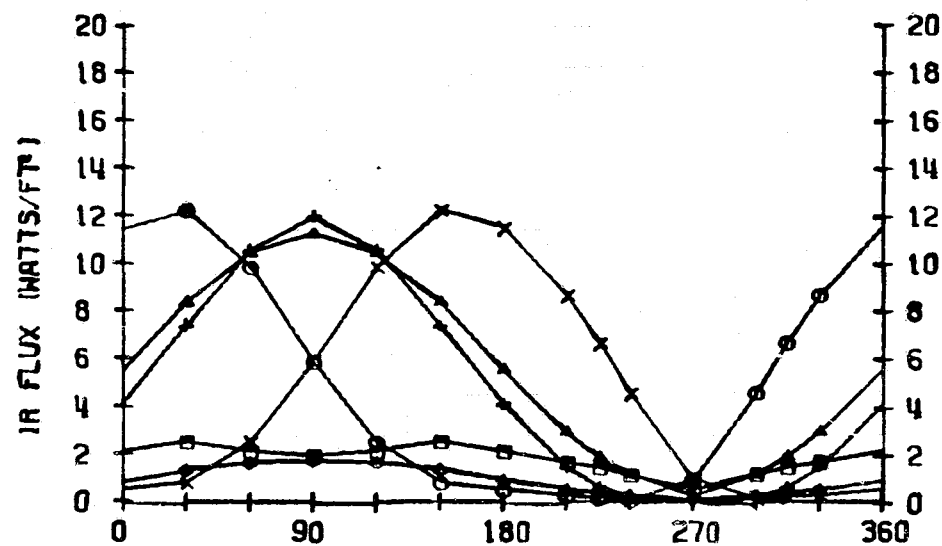


ORBIT POSITION (DEG)

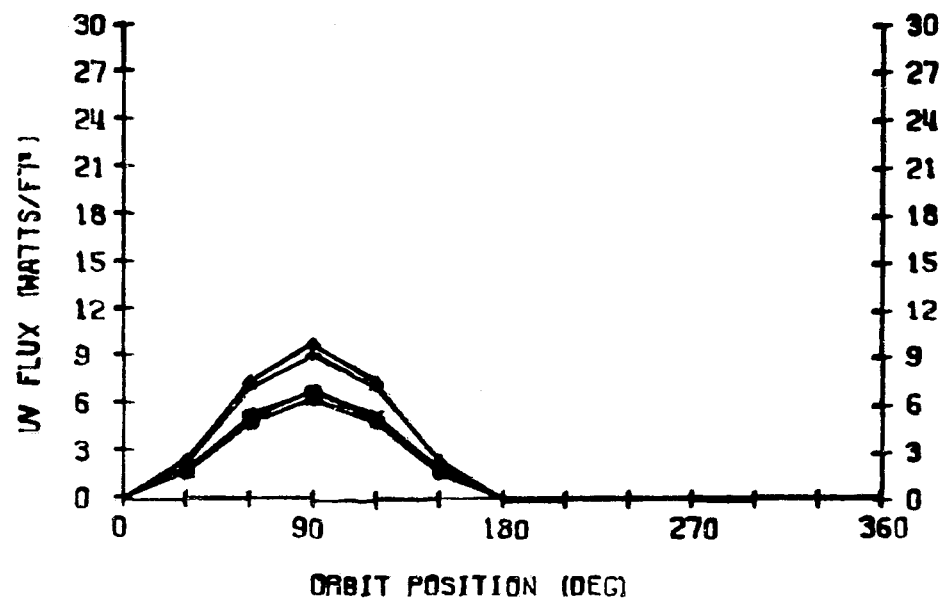
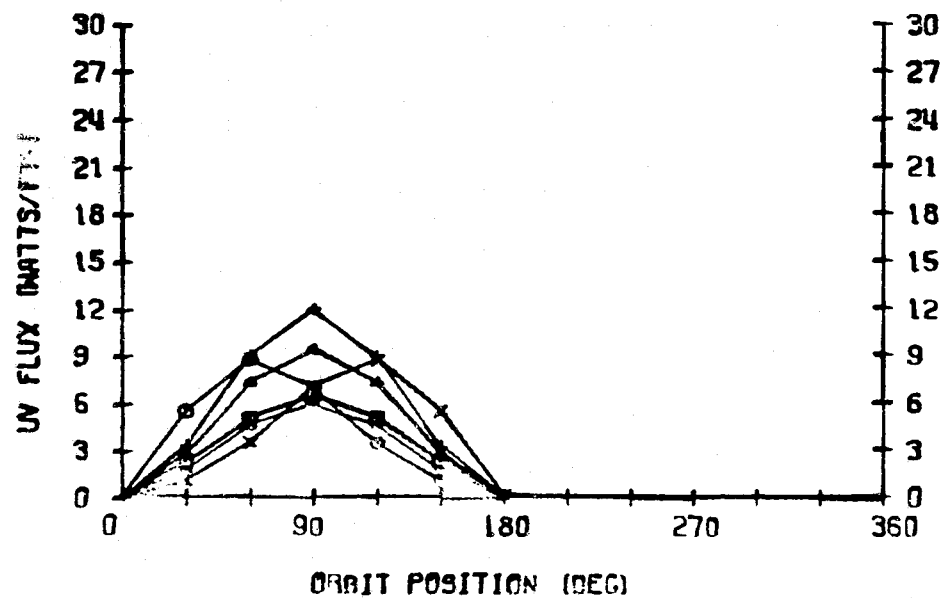
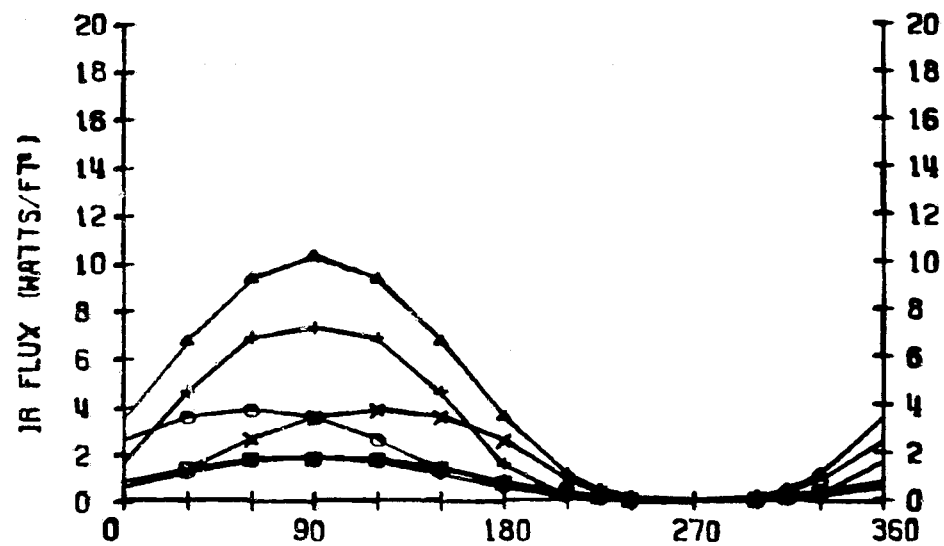
ORBIT POSITION (DEG)

450 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=60 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	4.2	3.8	3.1	5.0	6.4	7.8
R	+Y (○)	4.1	3.6	2.3	5.4	3.4	6.8
F	+Z (△)	0.1	0.1	0.1	1.2	0.8	3.0
L	-X (+)	3.7	3.5	3.0	4.6	2.9	5.3
U	-Y (X)	4.0	3.2	2.4	5.3	3.3	6.7
X	-Z (◇)	6.2	6.7	6.1	6.4	7.5	7.9

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OF POOR QUALITY

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

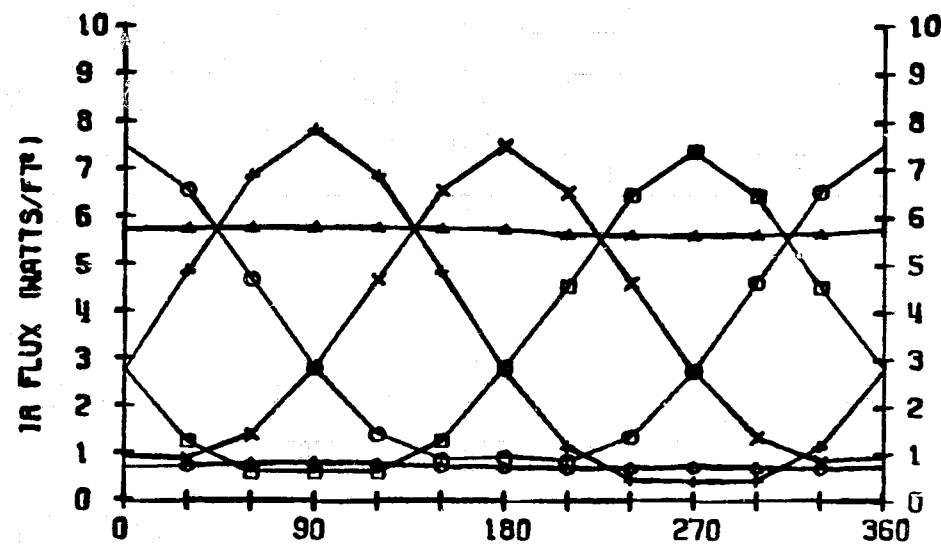
FOR

450 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

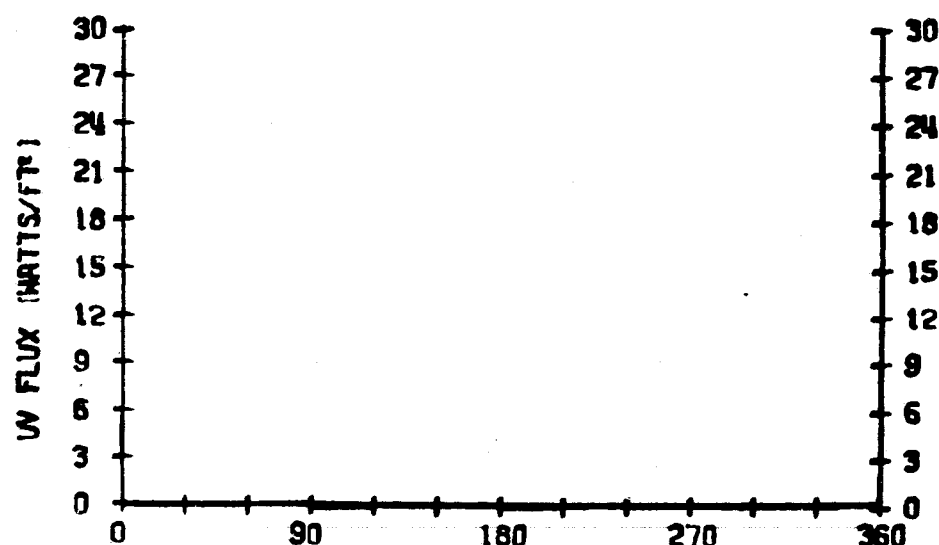
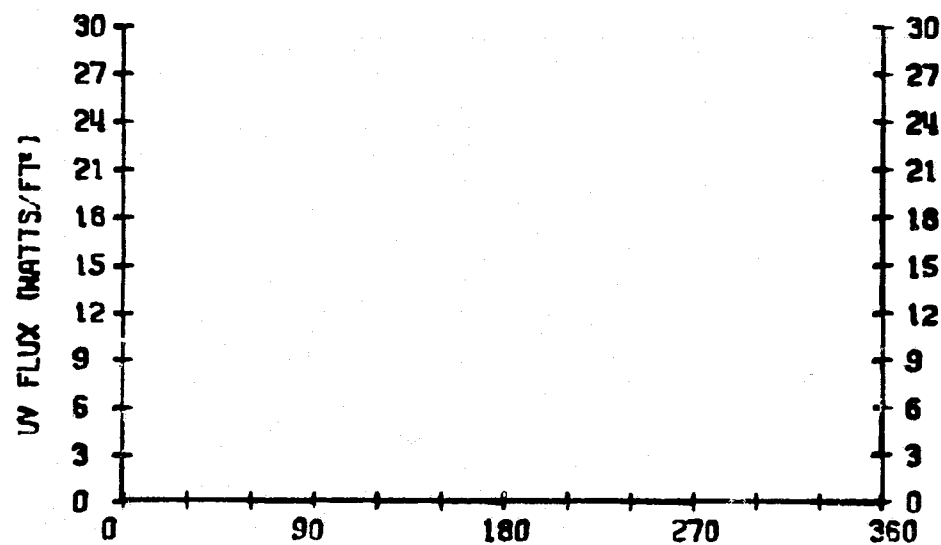
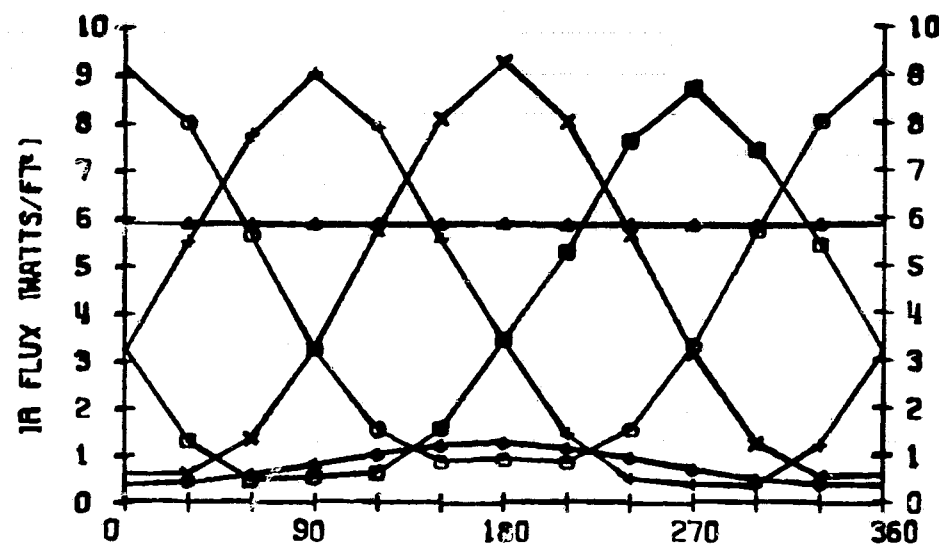
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.3	3.8	4.4	2.2	2.0	0.7
R	+Y (○)	3.4	4.1	5.2	1.8	4.7	1.4
F	+Z (Δ)	5.7	5.8	9.8	4.5	5.2	3.3
L	-X (+)	3.4	3.9	4.5	2.4	4.7	2.5
U	-Y (X)	3.4	4.0	5.2	1.8	4.7	1.4
X	-Z (◇)	0.7	0.8	0.9	0.8	0.8	0.5
U	+X (□)	0.0	0.0	0.0	0.0	0.0	0.0
V	+Y (○)	0.0	0.0	0.0	0.0	0.1	0.0
F	+Z (Δ)	0.0	0.0	0.0	0.0	0.0	0.0
L	-X (+)	0.0	0.0	0.0	0.0	0.0	0.0
U	-Y (X)	0.0	0.0	0.0	0.0	0.1	0.0
X	-Z (◇)	0.0	0.0	0.0	0.0	0.0	0.0

450 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1



LOCATION 2

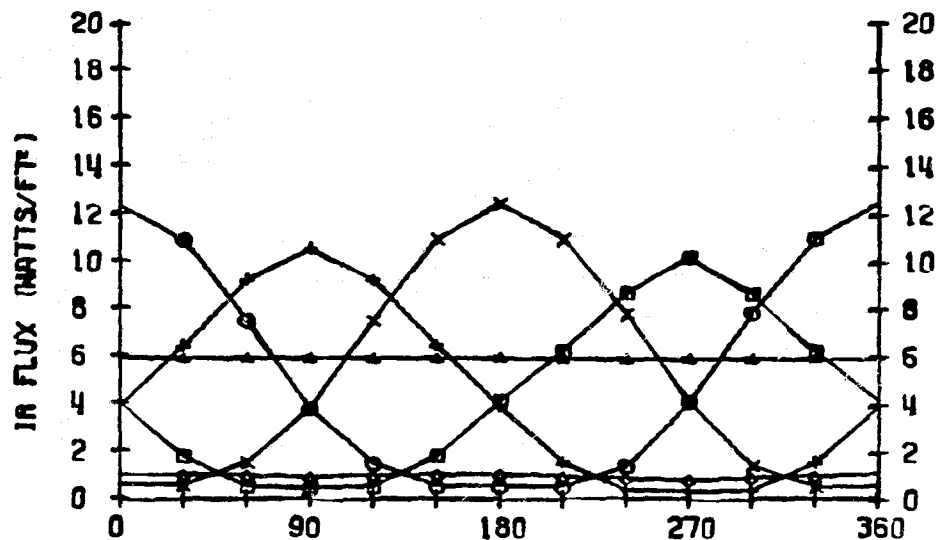


ORBIT POSITION (DEG)

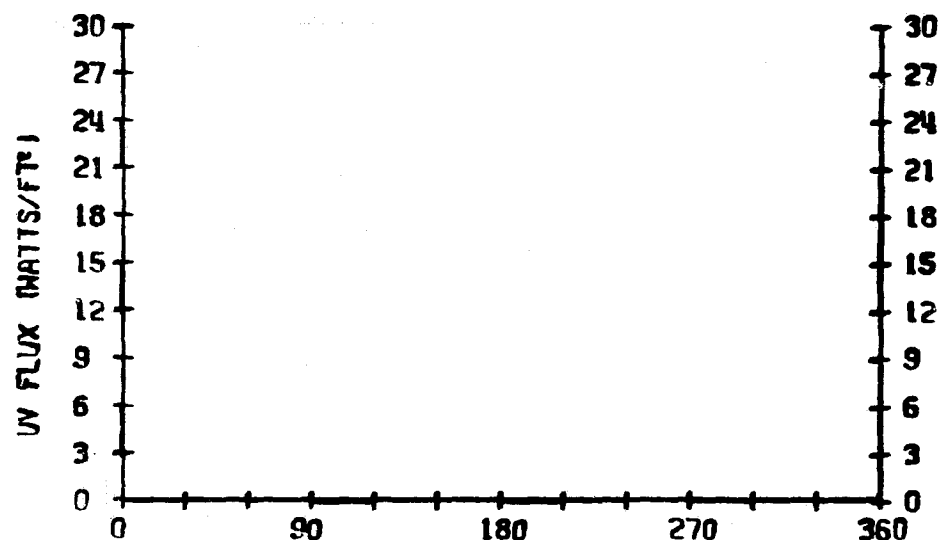
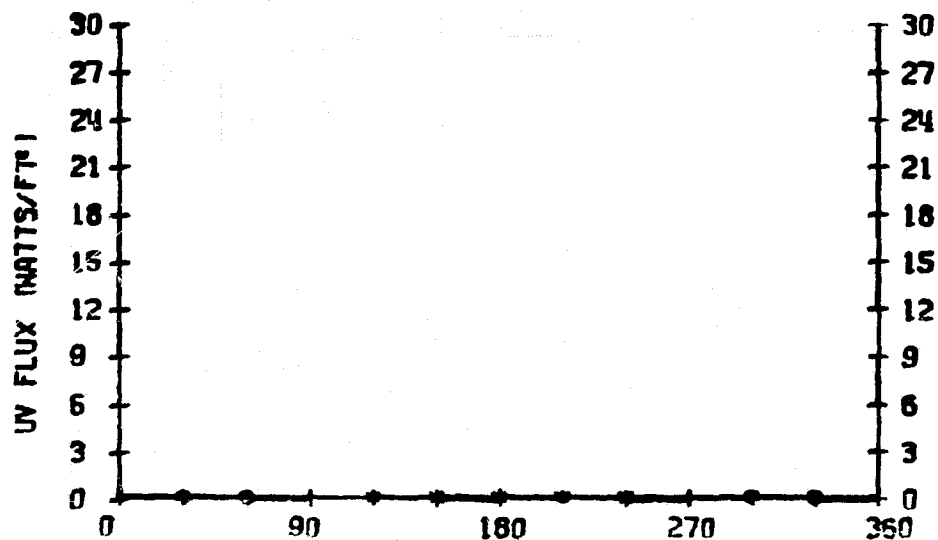
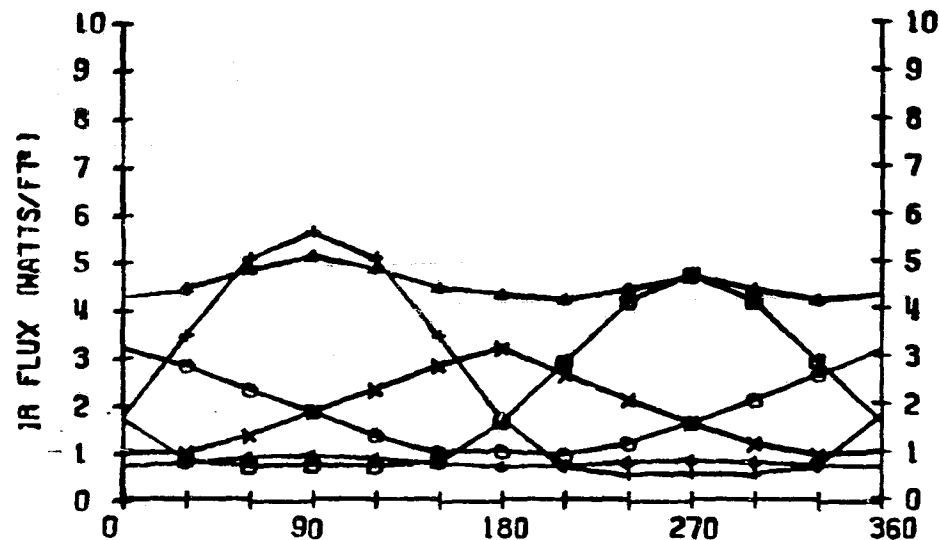
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3



LOCATION 4

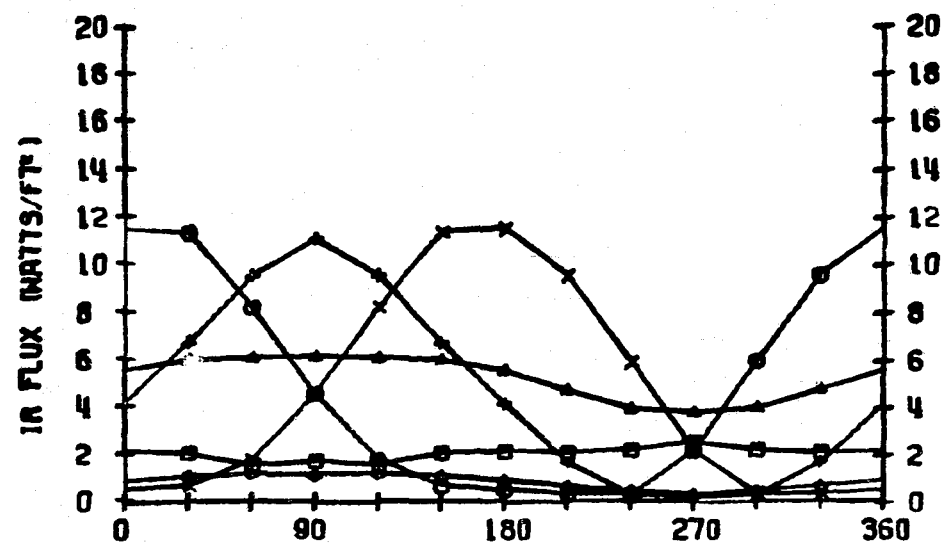


ORBIT POSITION (DEG)

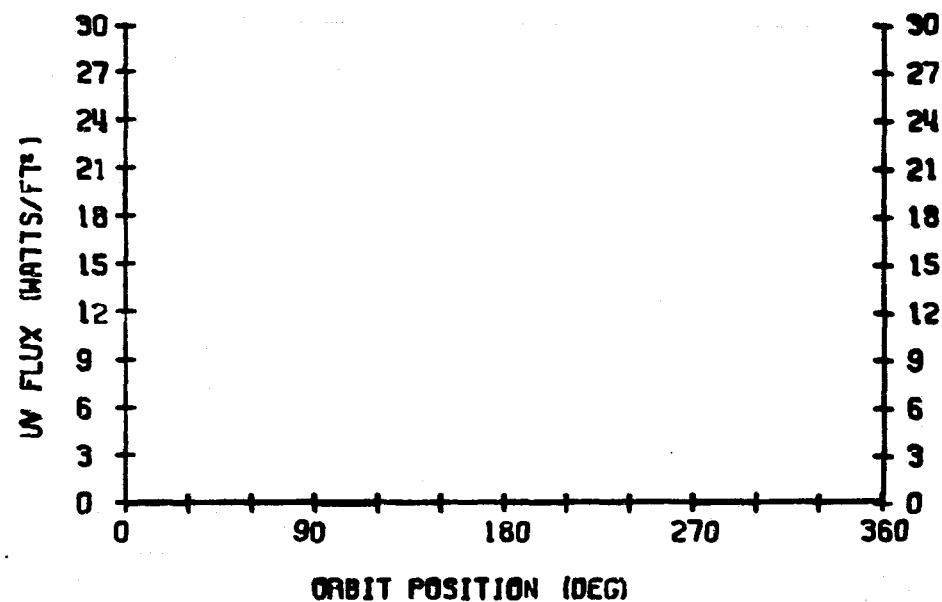
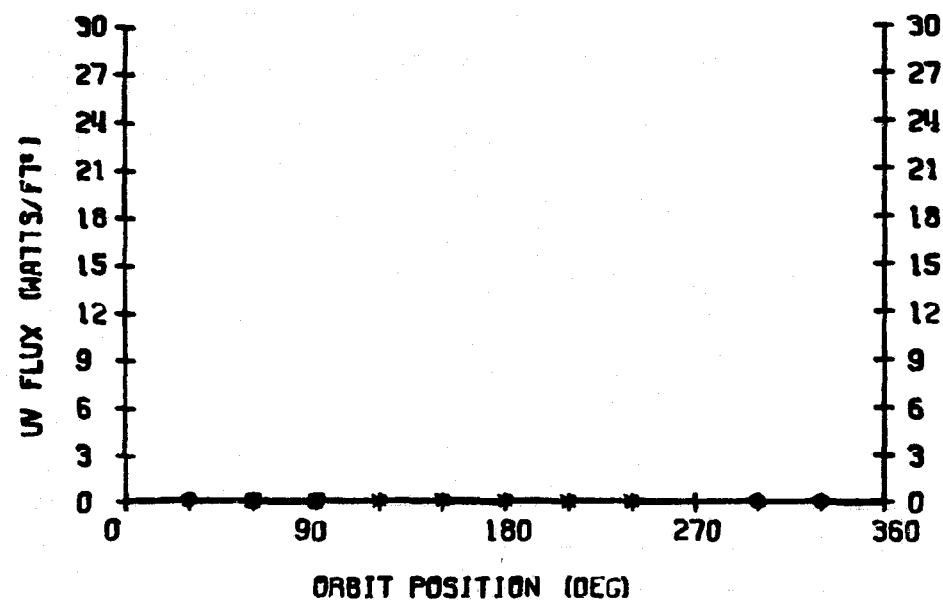
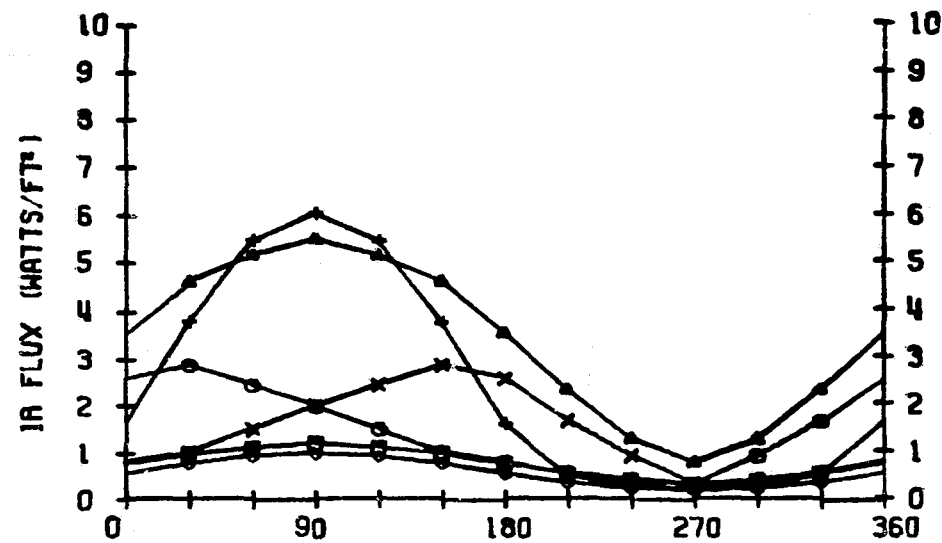
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.2	2.9	2.3	3.8	4.7	5.5
R	+Y (○)	3.3	2.9	1.9	4.2	2.4	4.7
F	+Z (△)	0.1	0.1	0.0	0.9	0.6	2.2
L	-X (+)	3.0	2.9	2.4	3.6	2.2	3.7
U	-Y (X)	3.1	2.5	1.9	4.1	2.4	4.6
X	-Z (◇)	4.7	5.3	4.7	4.9	5.2	5.2

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

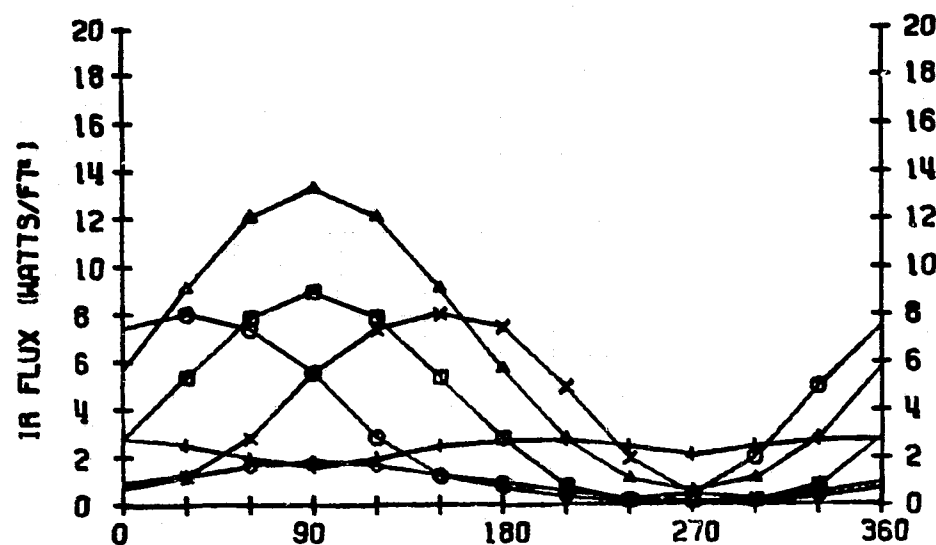
FOR

450 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

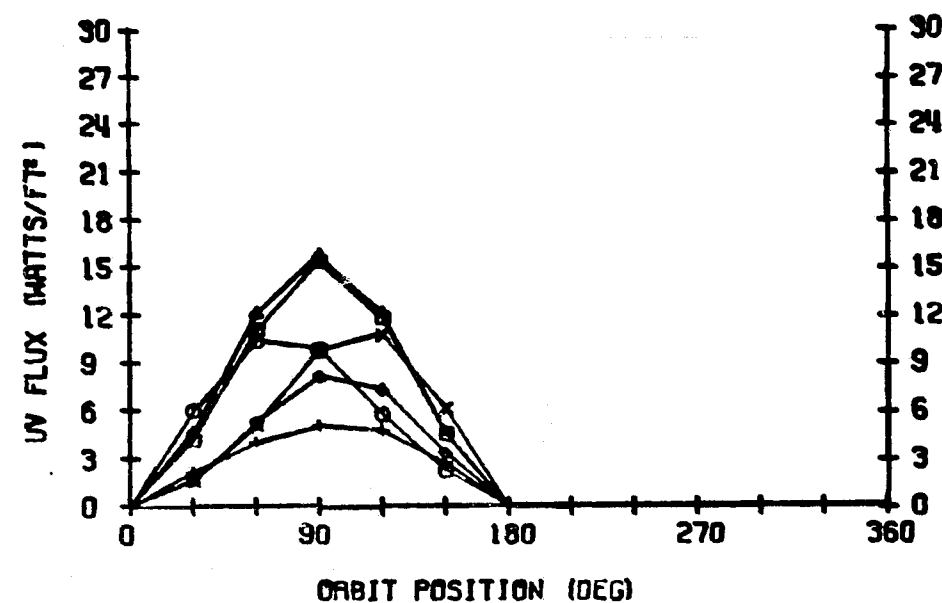
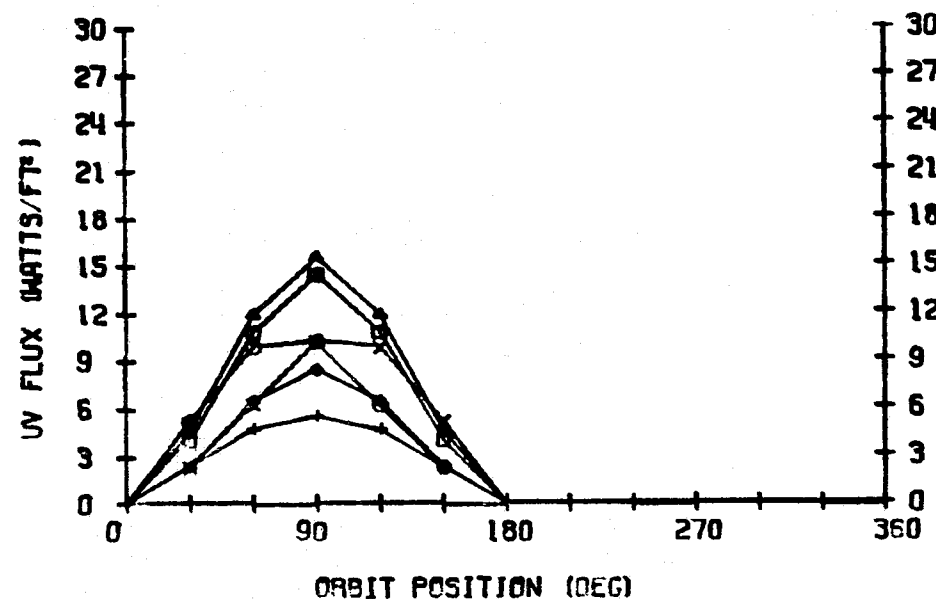
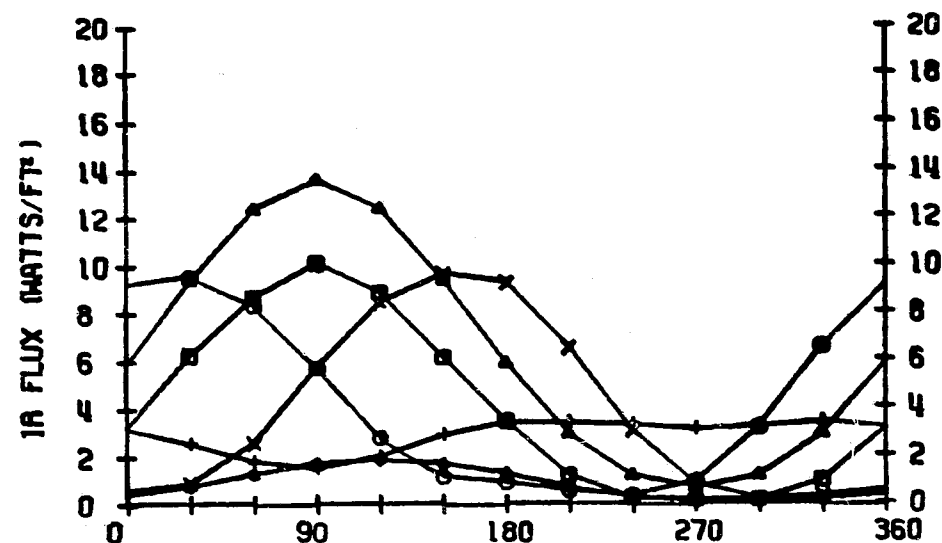
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.6	4.1	4.7	2.5	2.1	0.8
R	+Y (○)	3.5	4.1	5.2	2.0	4.7	1.4
F	+Z (Δ)	6.3	6.4	6.4	5.1	5.7	3.7
L	-X (+)	2.4	2.8	3.5	1.6	3.6	1.6
U	-Y (x)	3.5	4.0	5.2	1.9	4.7	1.4
X	-Z (◇)	0.8	0.8	1.0	0.9	0.8	0.6
U	+X (□)	3.7	3.9	4.1	3.1	1.7	1.4
V	+Y (○)	2.8	2.9	3.0	2.6	2.3	1.7
F	+Z (Δ)	4.0	4.1	4.1	3.7	3.5	2.5
L	-X (+)	1.7	1.6	1.5	1.9	1.4	1.5
U	-Y (x)	2.8	2.8	3.0	2.6	2.3	1.7
X	-Z (◇)	2.2	2.1	2.1	2.4	1.5	1.6

450 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 1

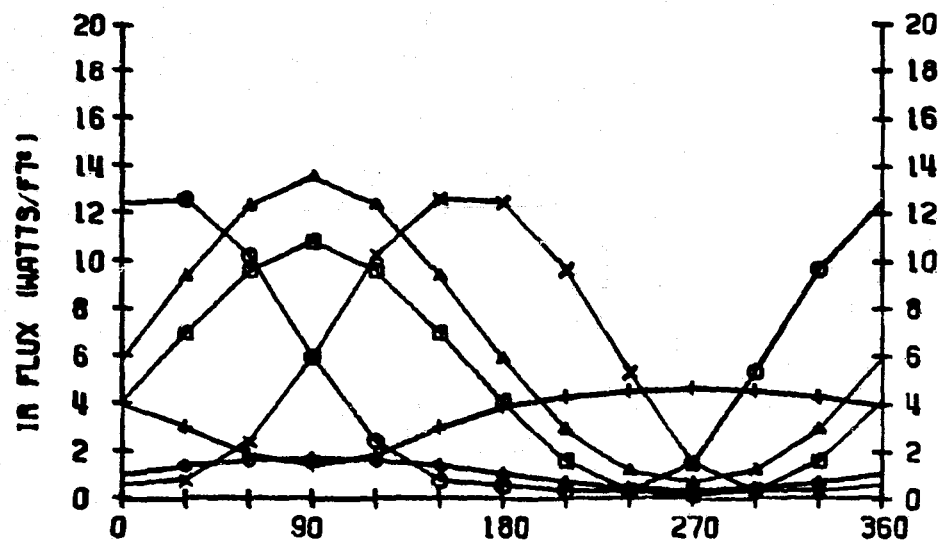


LOCATION 2

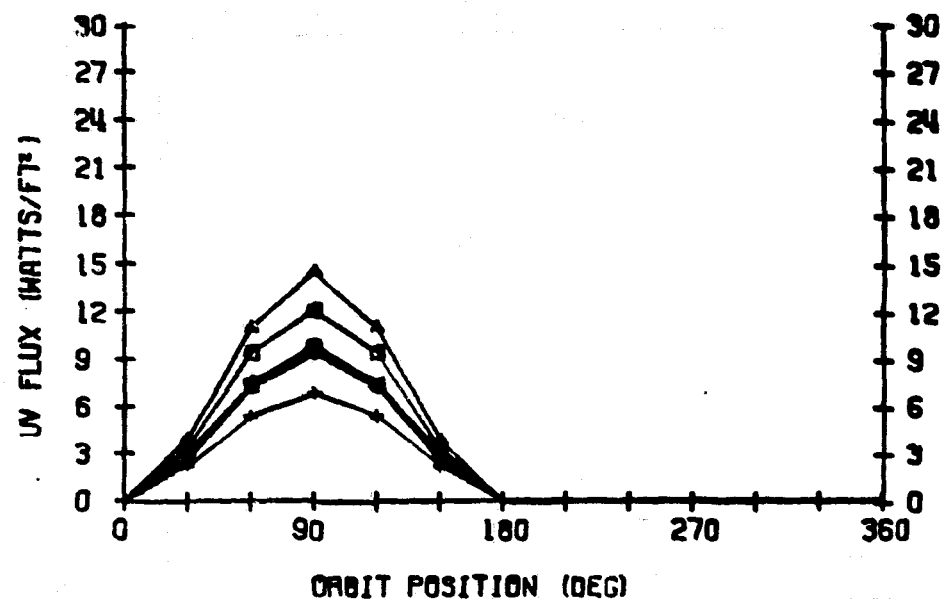
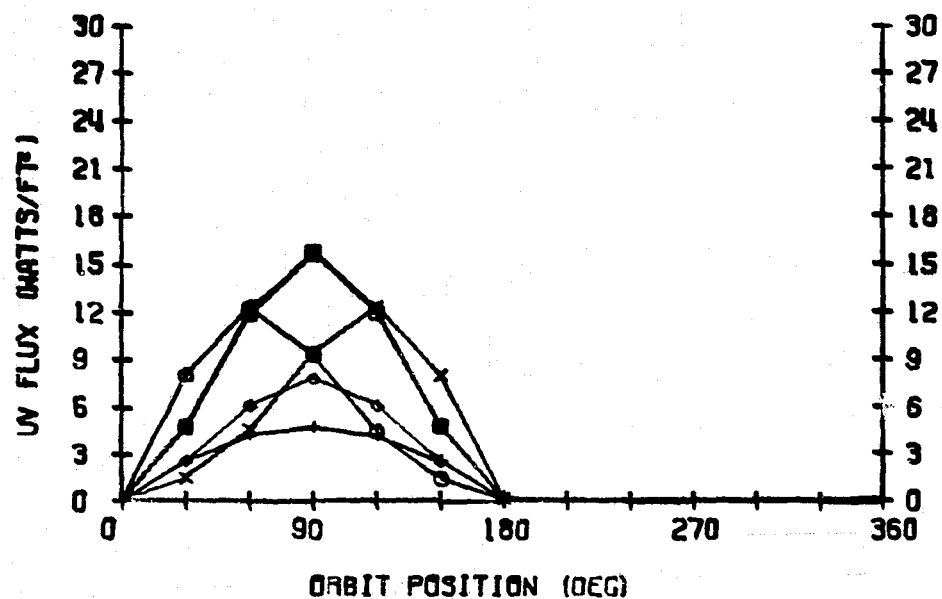
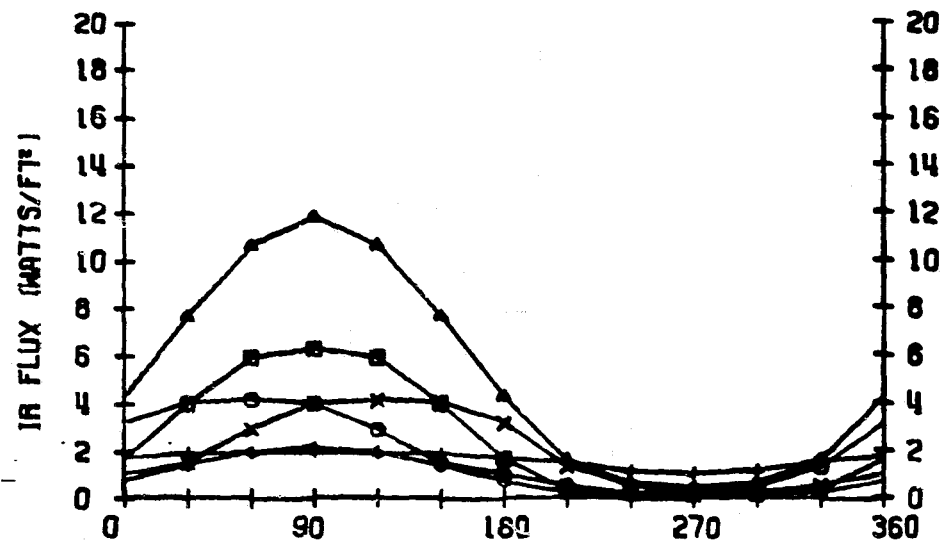


450 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 3

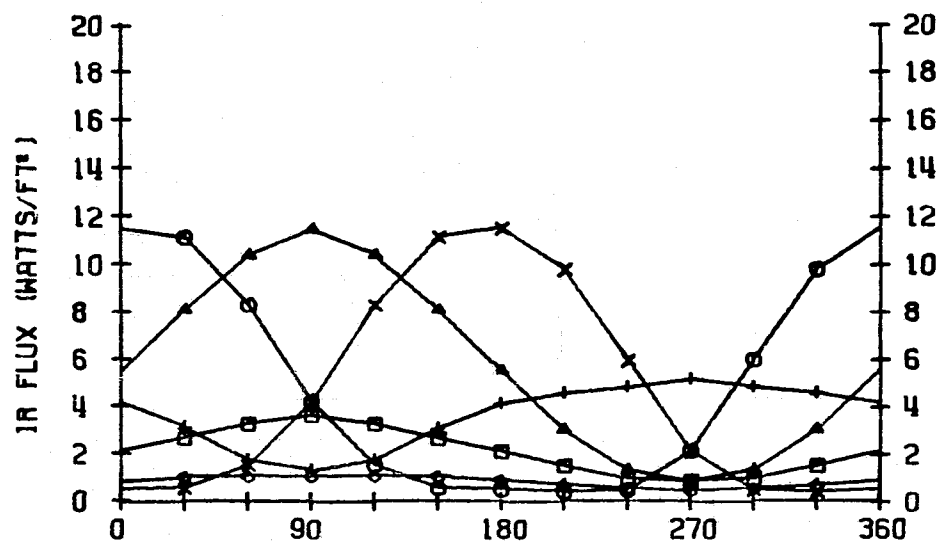


LOCATION 4

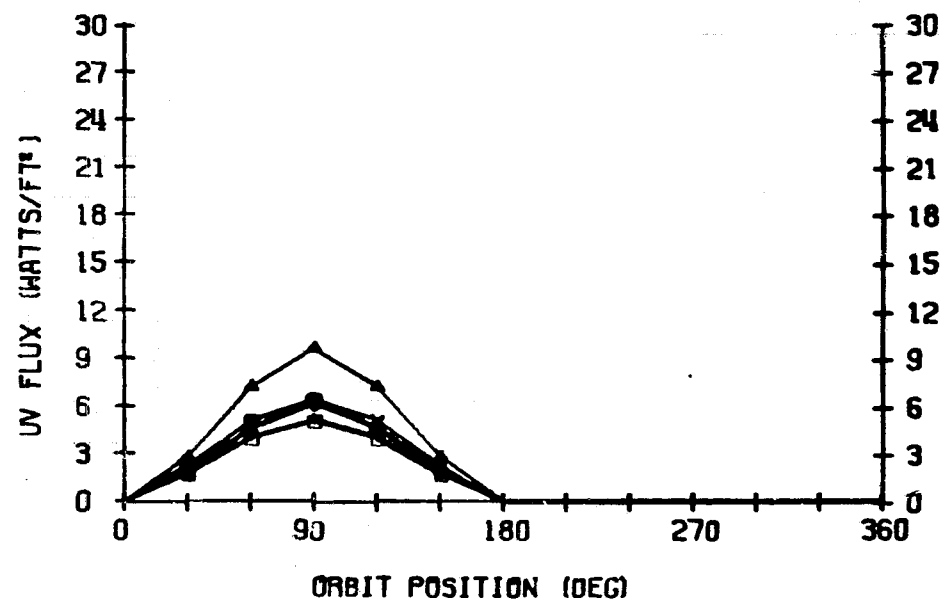
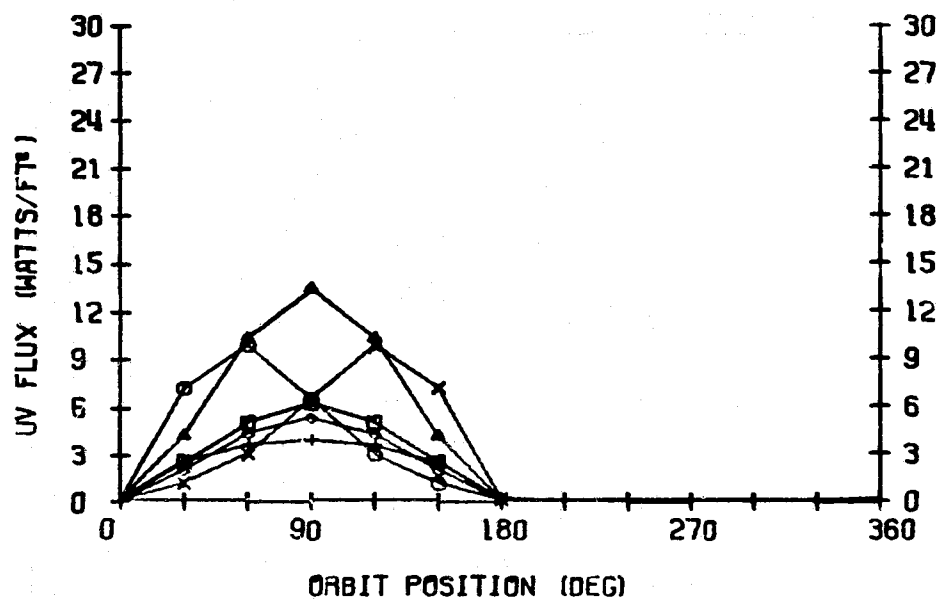
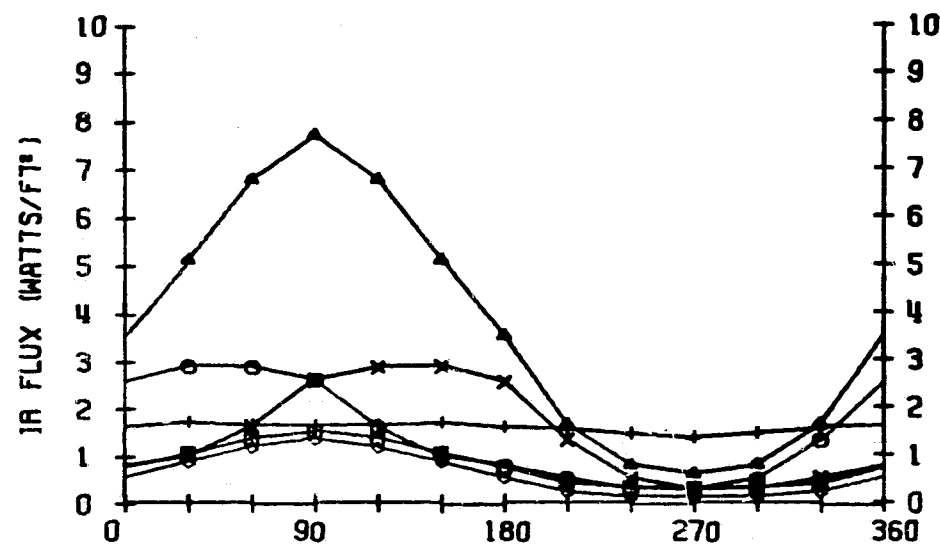


450 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=-45 DEG * -Z SOLAR INERTIAL * +X NORMAL TO ECLIPTIC PLANE

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	4.4	4.0	3.1	5.5	5.1	6.4
R	+Y (○)	4.7	4.1	2.7	6.3	2.9	5.9
F	+Z (△)	0.1	0.1	0.1	1.3	0.6	2.5
L	-X (+)	4.7	4.3	3.7	5.6	3.1	5.0
U	-Y (X)	4.6	3.7	2.7	6.1	2.9	5.8
X	-Z (◇)	7.2	7.8	7.0	7.6	6.6	6.7

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 7

Bay earth oriented, nose in direction of flight

Beta angles - 0° , 30° , 60° , 90° , -45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

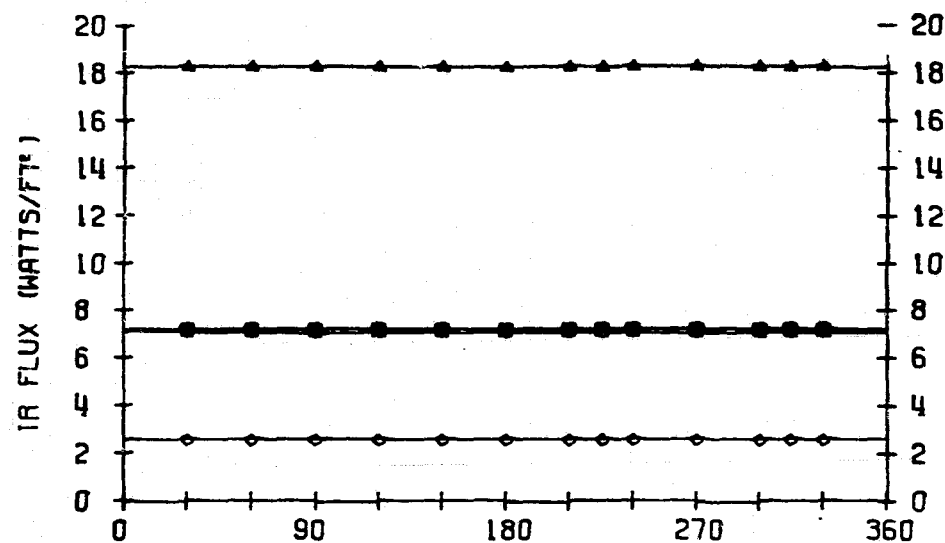
FOR

450 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

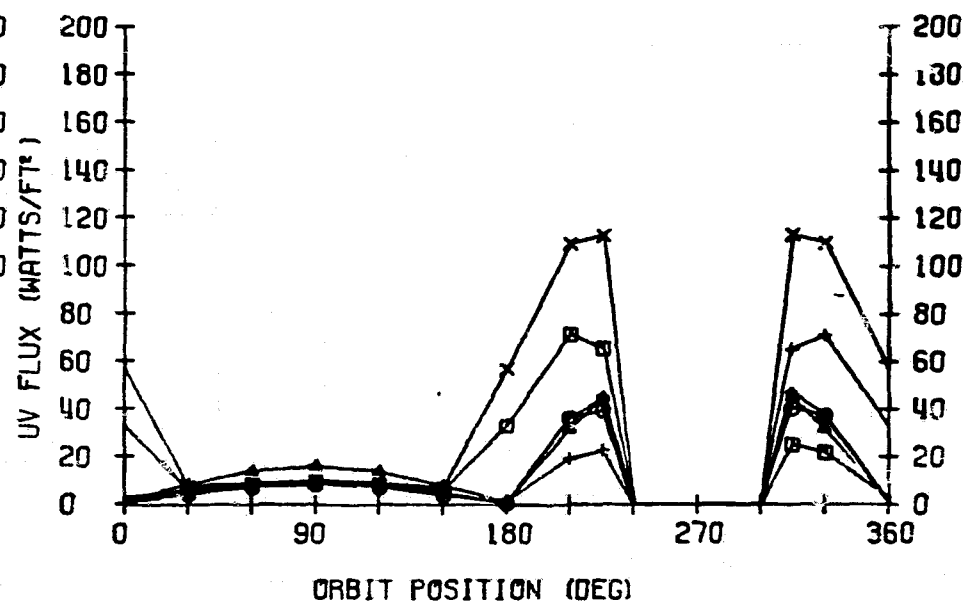
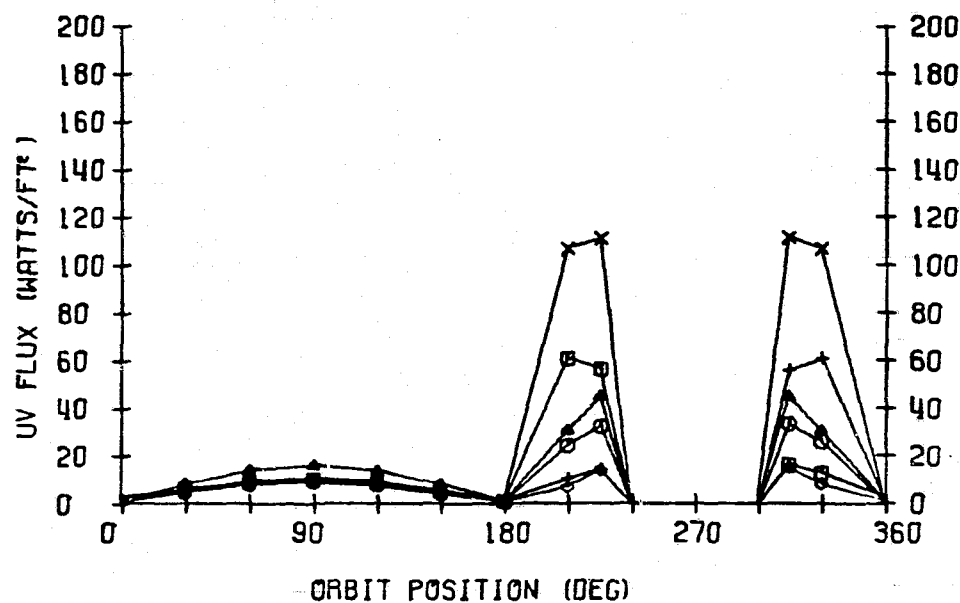
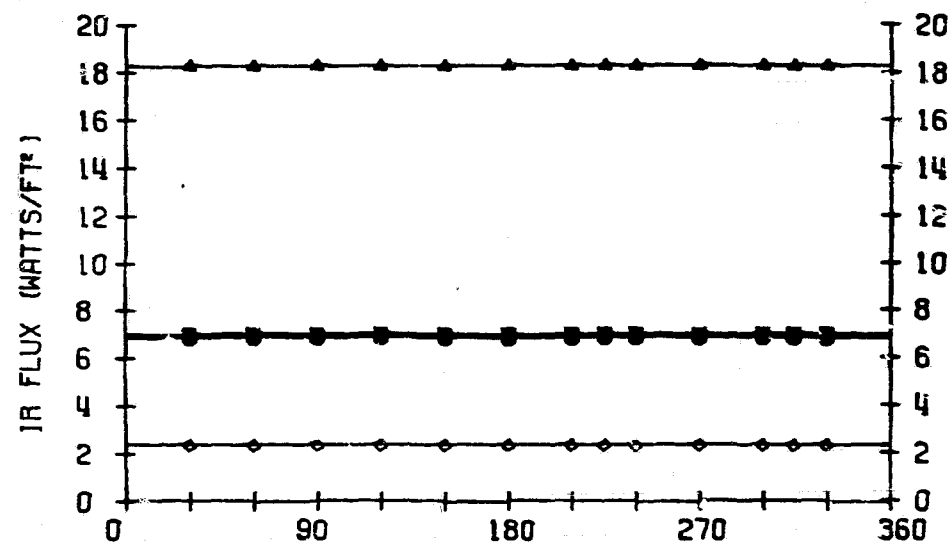
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	7.2	7.0	6.8	6.7	3.9	2.4
R	+Y (○)	7.2	6.8	6.6	5.8	6.1	4.5
F	+Z (△)	18.2	18.3	18.3	16.6	17.0	12.8
L	-X (+)	7.1	6.9	6.8	6.7	6.8	6.5
U	-Y (X)	7.2	7.0	6.7	5.8	6.1	4.5
X	-Z (◇)	2.6	2.3	2.2	3.0	1.8	2.2
U	+X (□)	9.8	14.0	18.6	5.6	15.4	5.2
V	+Y (○)	7.6	9.0	5.3	6.9	5.5	6.1
F	+Z (△)	10.9	11.0	10.9	6.4	11.7	6.8
L	-X (+)	9.3	13.5	15.9	5.2	18.2	5.1
U	-Y (X)	21.8	31.6	55.4	4.5	60.7	4.6
X	-Z (◇)	4.5	9.5	6.9	4.2	6.8	4.1

450 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1

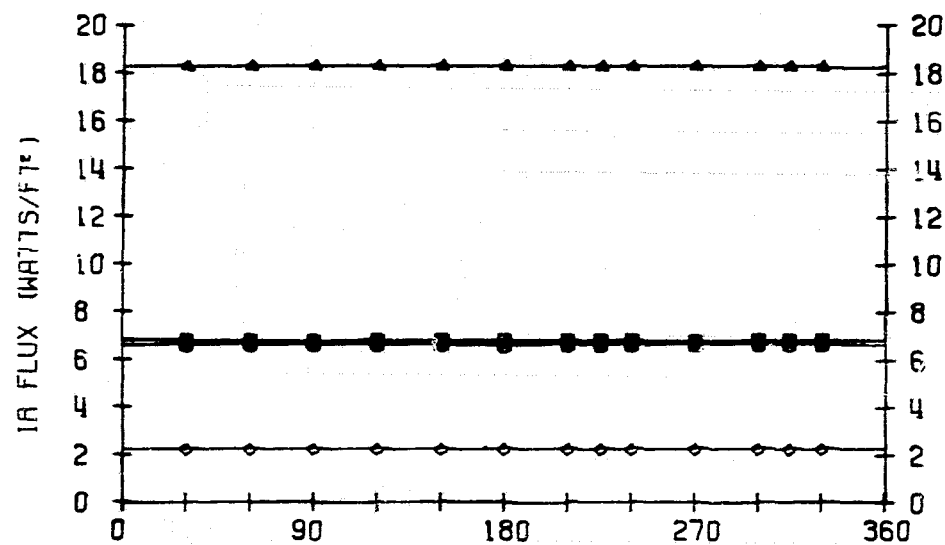


LOCATION 2

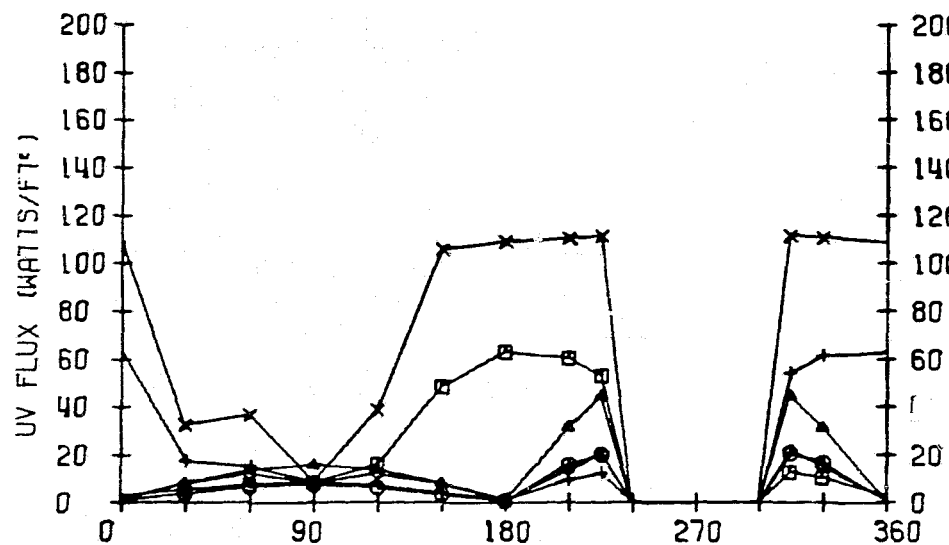
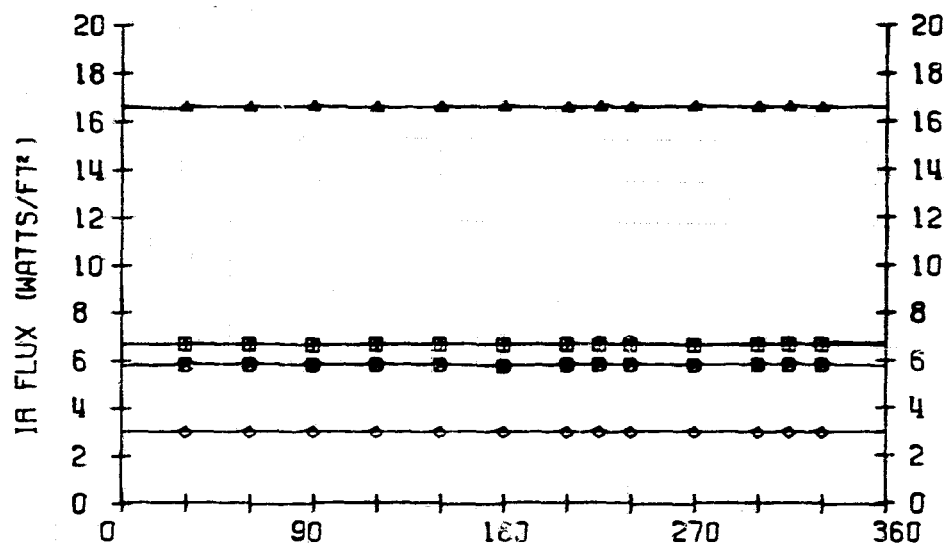


450 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

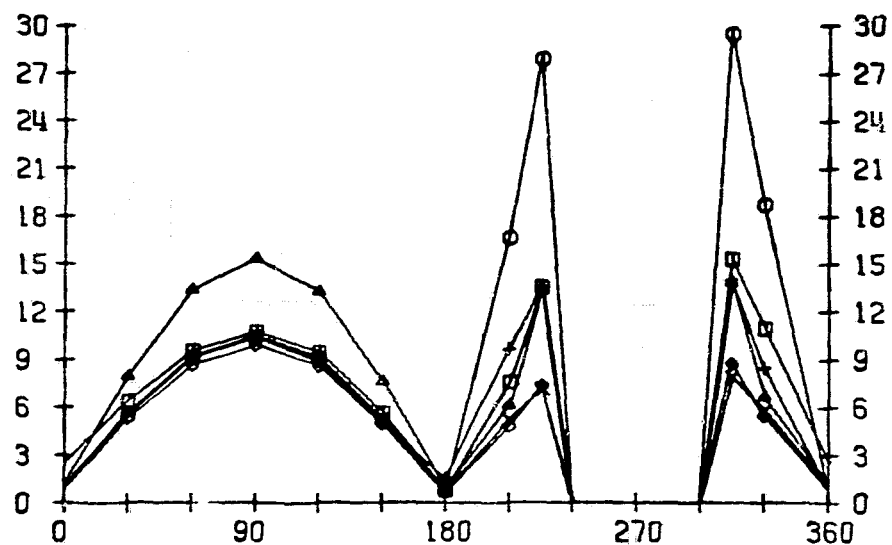
LOCATION 3



LOCATION 4



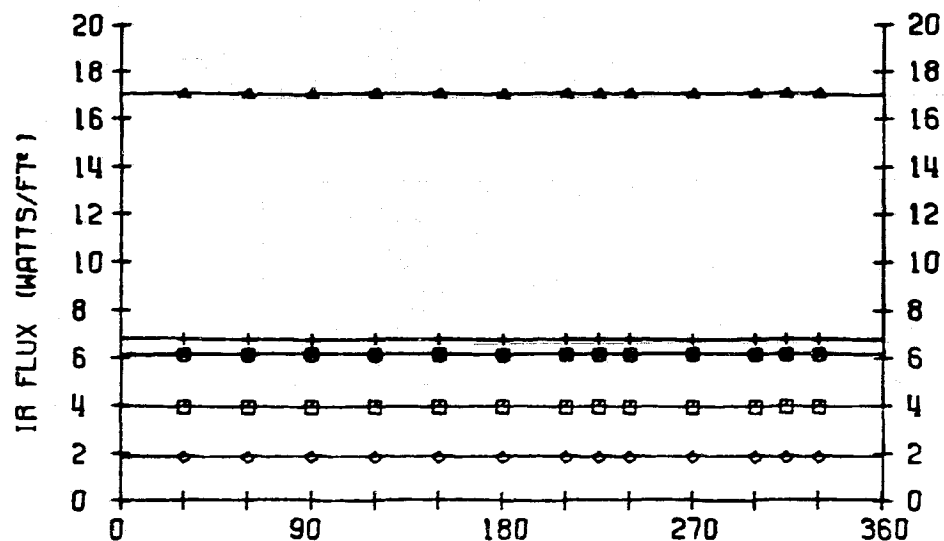
ORBIT POSITION (DEG)



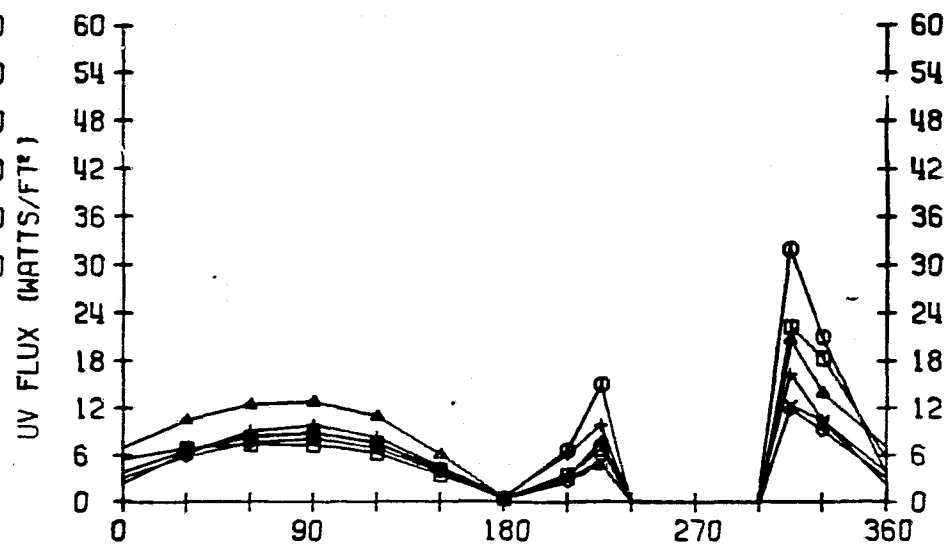
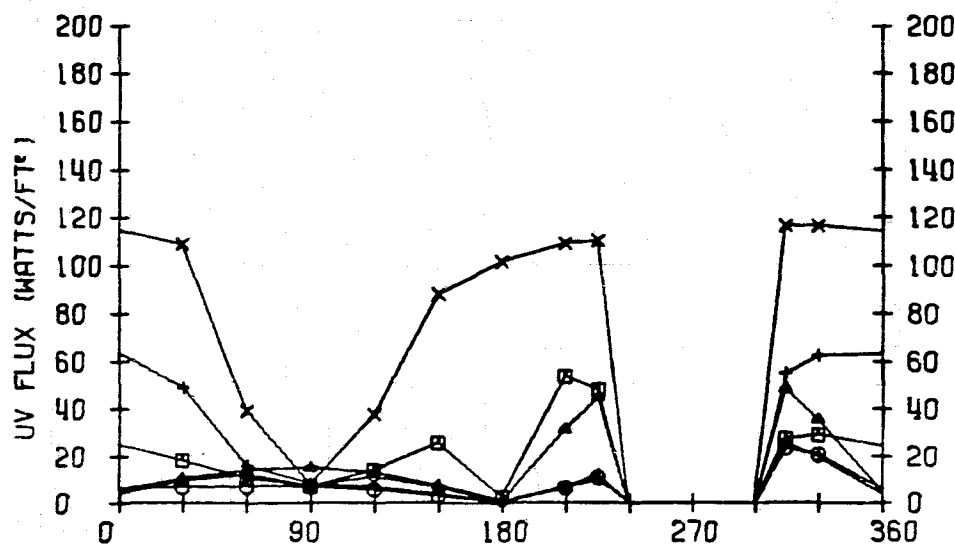
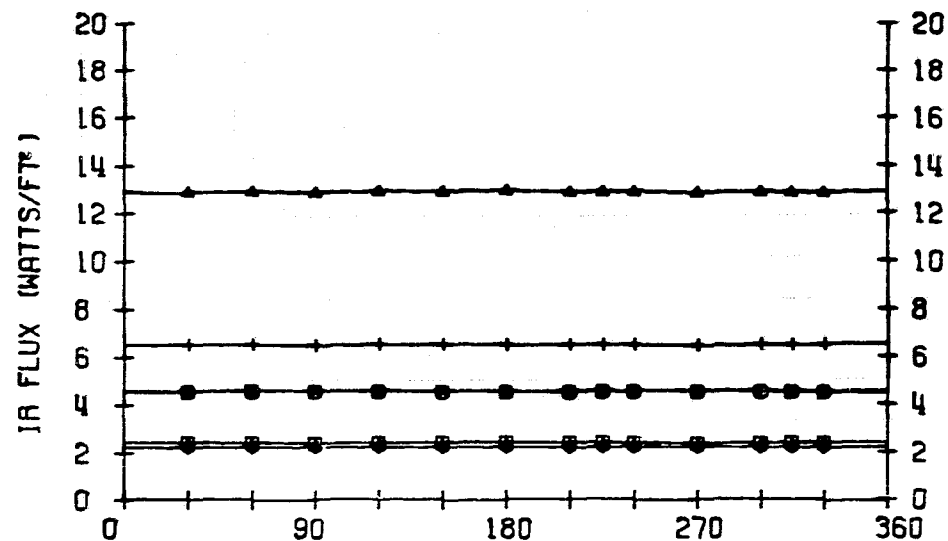
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	13.4	12.8	9.5	16.6	16.1	20.5
R	+Y (○)	14.8	13.5	8.4	18.9	9.7	19.4
F	+Z (△)	0.3	0.2	0.2	3.9	2.0	7.8
L	-X (+)	13.2	12.7	10.4	16.0	9.3	15.9
U	-Y (X)	12.8	10.4	7.5	17.5	8.9	18.6
X	-Z (◇)	21.1	24.2	20.7	22.2	21.2	22.3

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

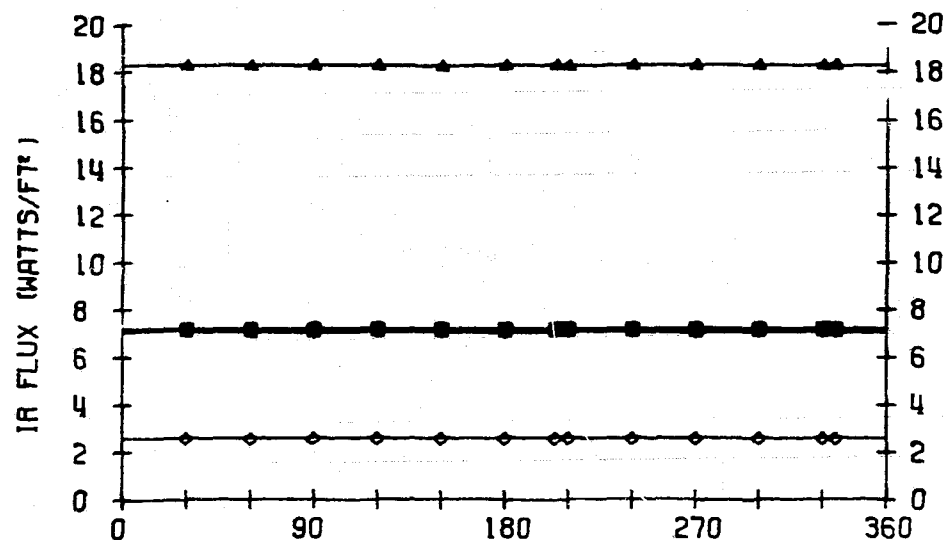
FOR

450 KM • BETA=30 DEG • +Z EARTH FACING • +X IN DIRECTION OF FLIGHT

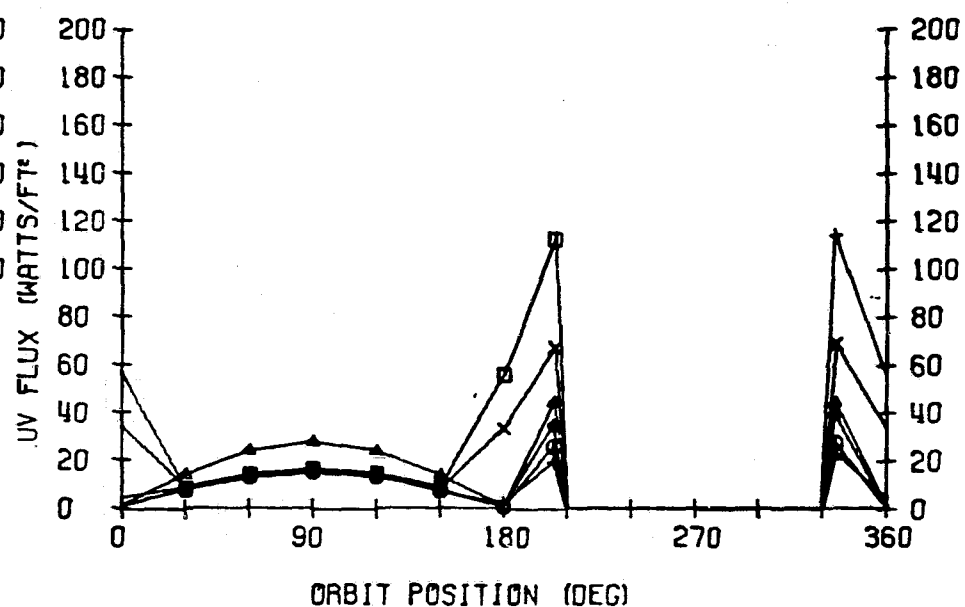
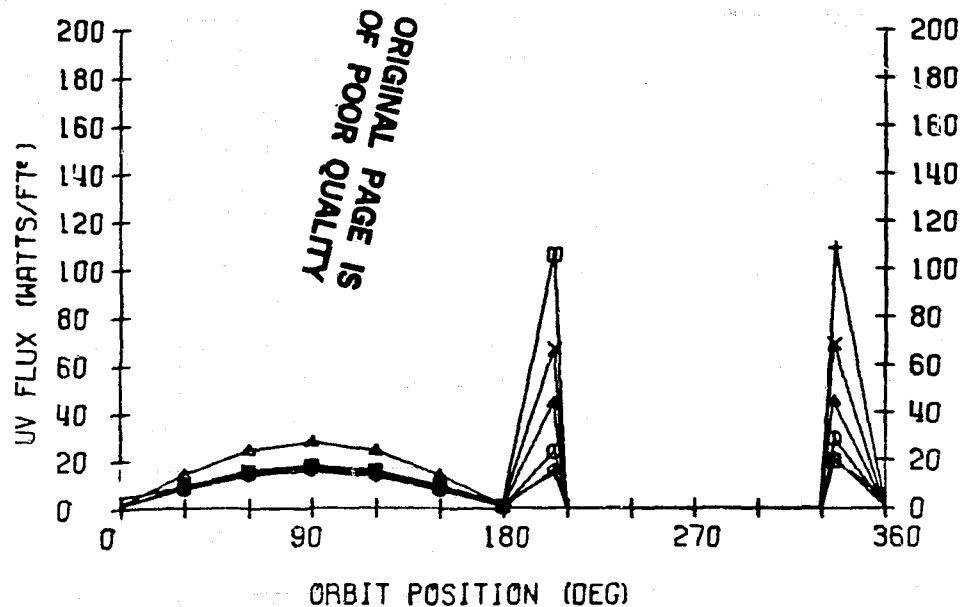
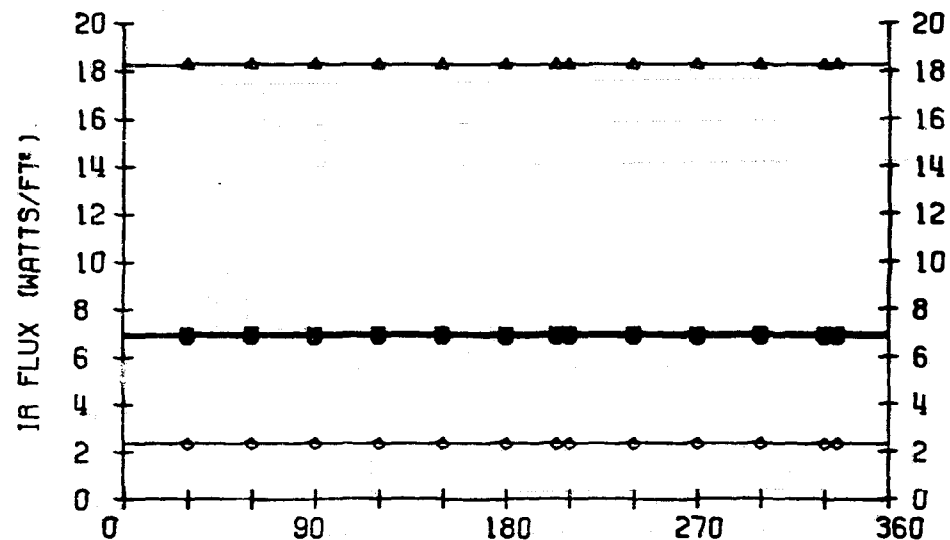
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	7.2	6.9	6.8	6.7	3.6	2.4
R	+Y (○)	7.2	6.8	6.6	5.8	6.1	4.5
F	+Z (△)	18.2	18.3	18.3	16.6	17.0	12.8
L	-X (+)	7.1	6.5	6.8	6.7	6.6	6.5
U	-Y (X)	7.2	7.0	6.7	5.8	6.1	4.5
X	-Z (◇)	2.6	2.3	2.2	3.0	1.8	2.2
U	+X (□)	10.1	14.1	17.3	8.5	9.9	6.5
V	+Y (○)	7.2	6.6	5.3	7.8	6.0	6.9
F	+Z (△)	11.7	11.6	11.6	10.6	10.8	9.5
L	-X (+)	9.7	13.9	17.1	8.4	17.0	7.9
U	-Y (X)	10.2	14.7	18.6	7.9	12.9	7.0
X	-Z (◇)	6.2	7.2	5.9	6.5	5.9	5.8

450 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1

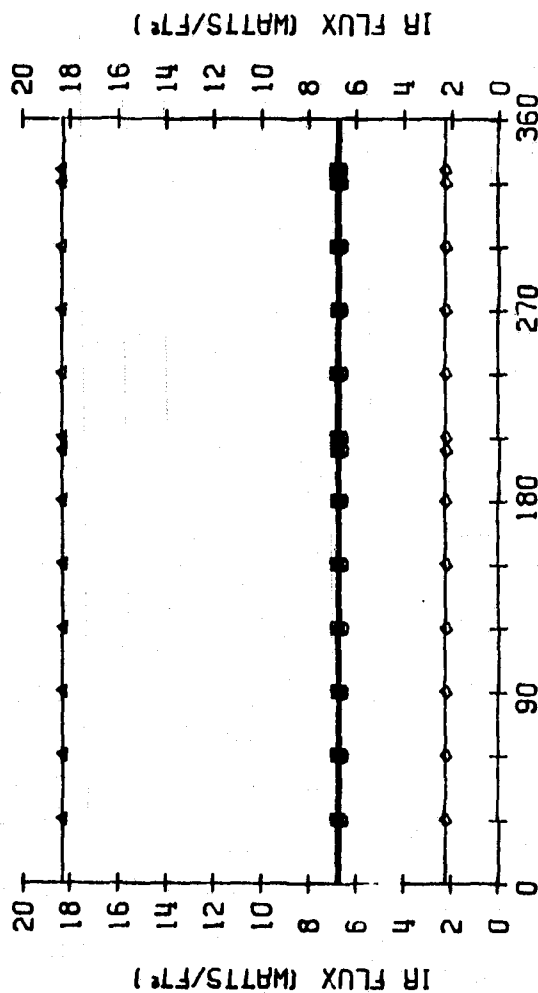


LOCATION 2

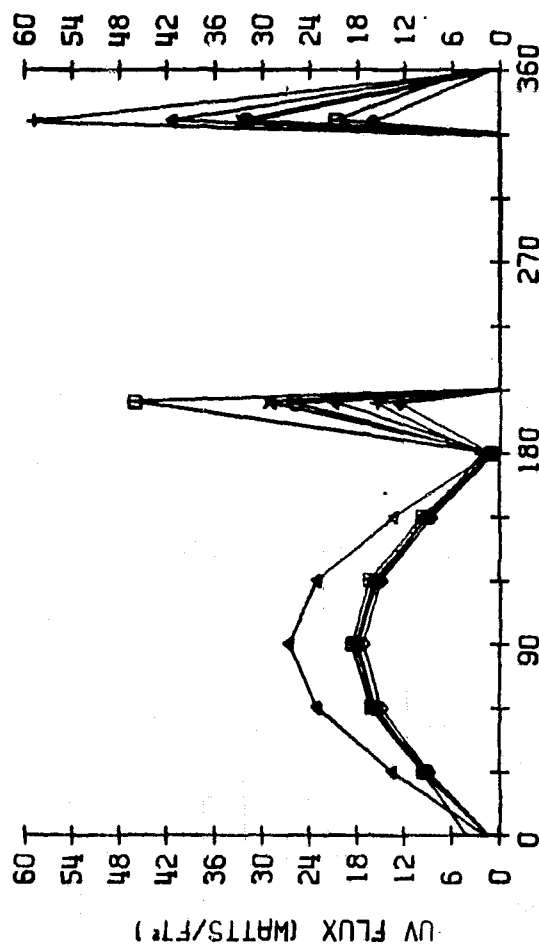
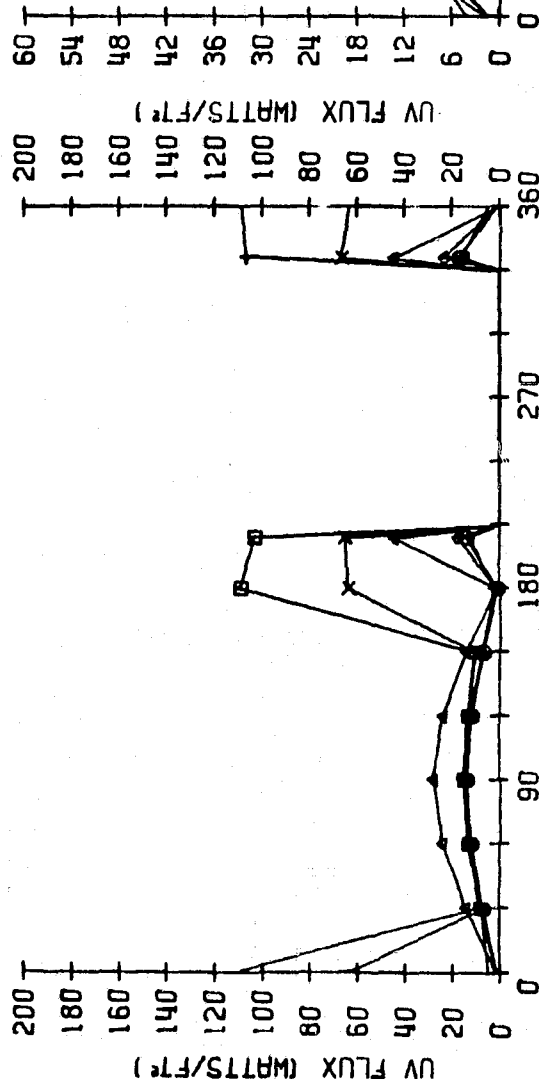
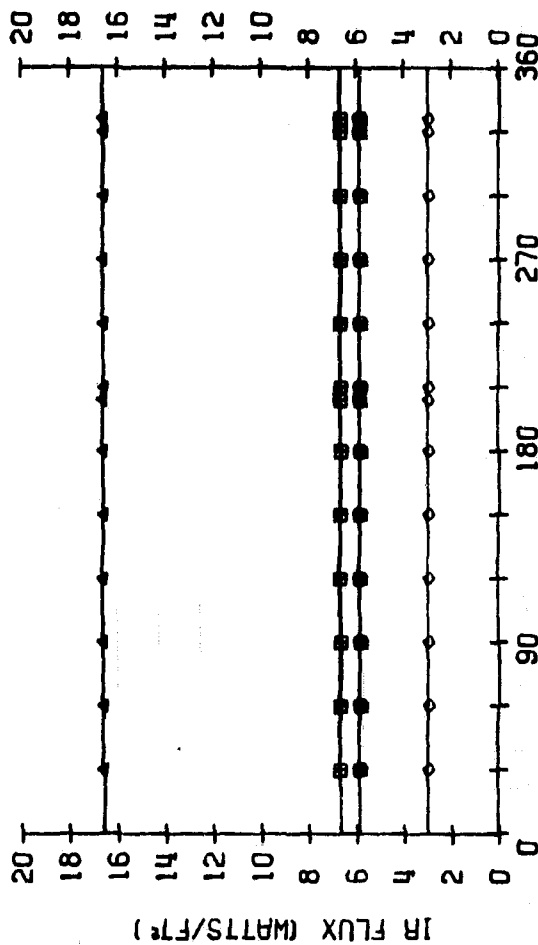


450 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3

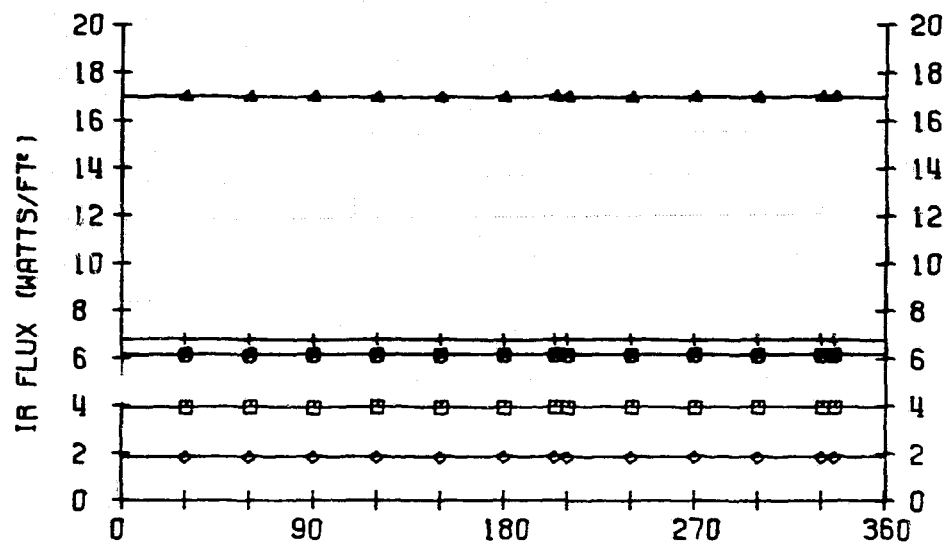


LOCATION 4

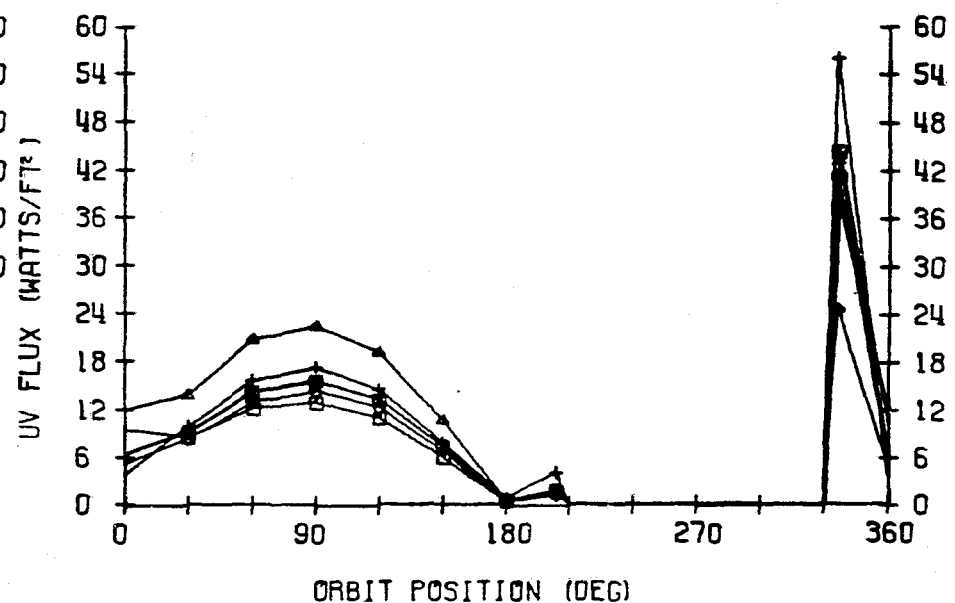
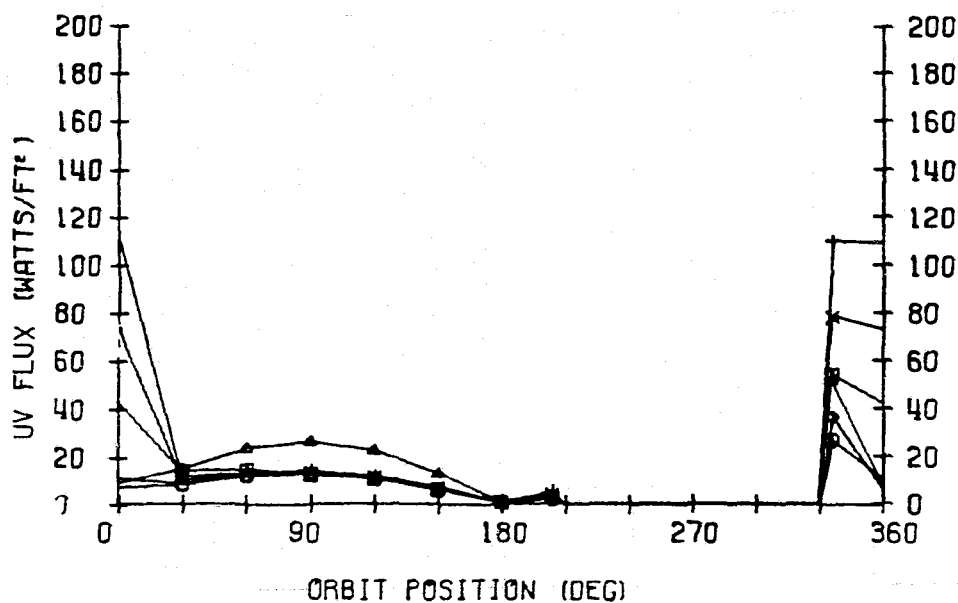
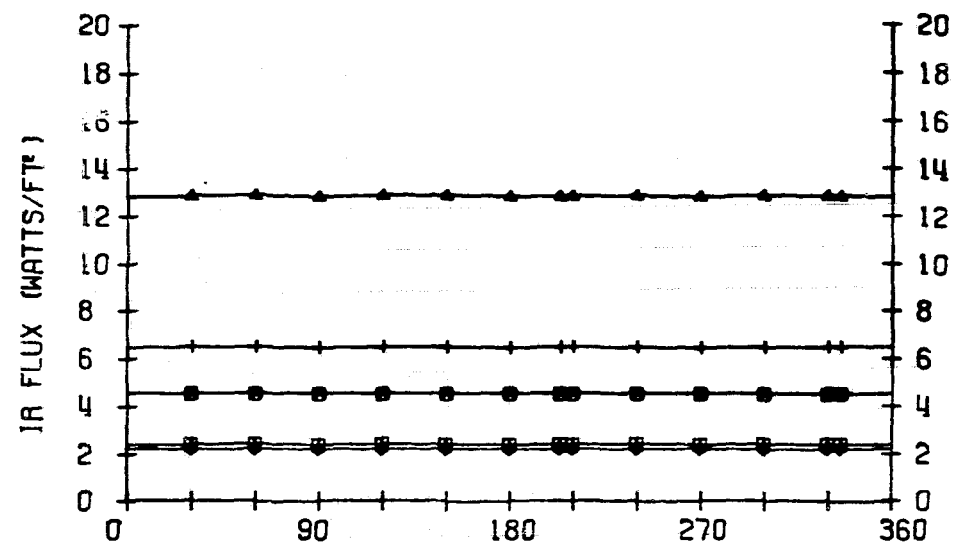


450 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=30 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	12.9	11.6	9.1	16.4	15.6	20.2
R	+Y (○)	13.4	11.1	7.5	18.3	8.9	18.7
F	+Z (△)	0.3	0.2	0.2	3.5	1.9	7.4
L	-X (+)	12.8	11.7	10.1	15.9	8.9	15.6
U	-Y (X)	12.6	10.4	7.4	17.5	8.7	18.5
X	-Z (◇)	21.3	22.1	20.2	22.8	20.7	22.5

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

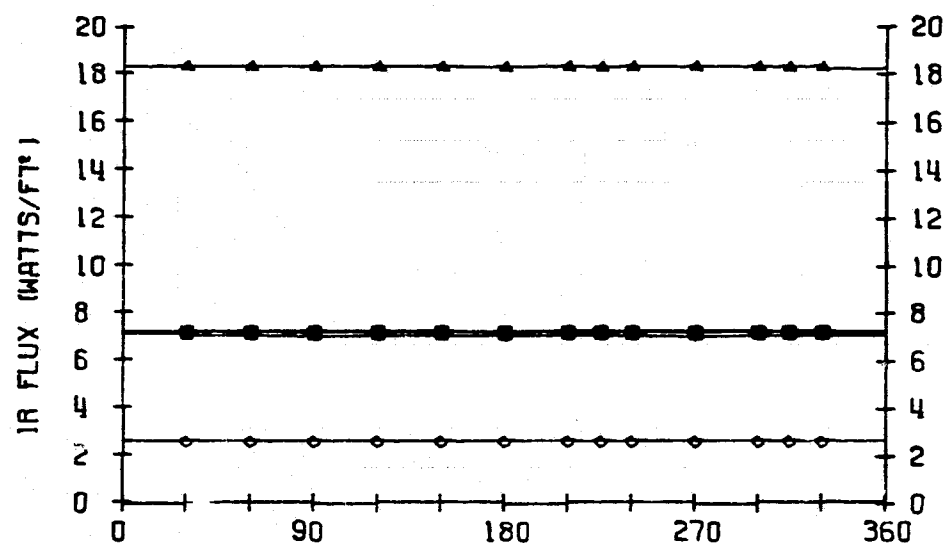
FOR

450 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

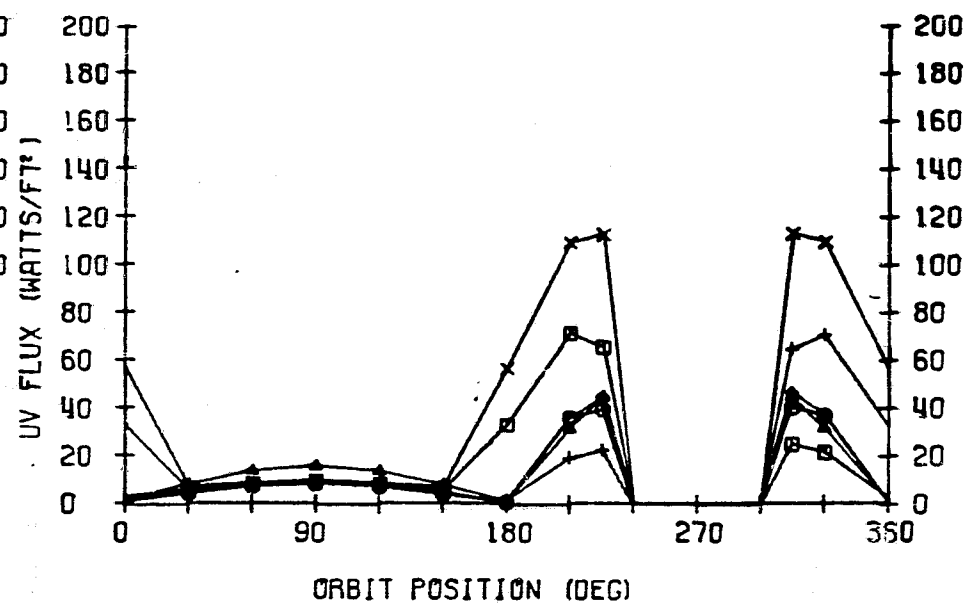
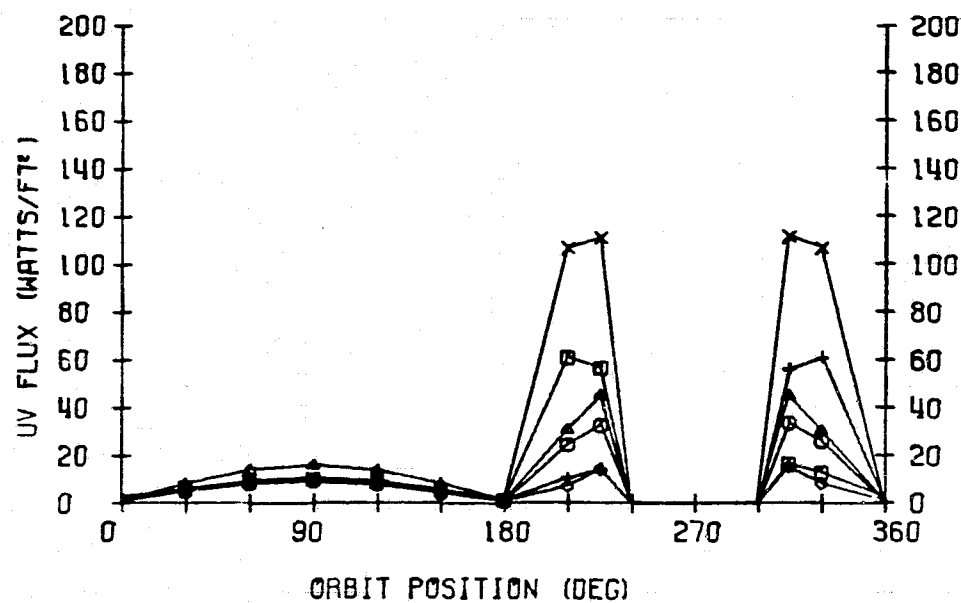
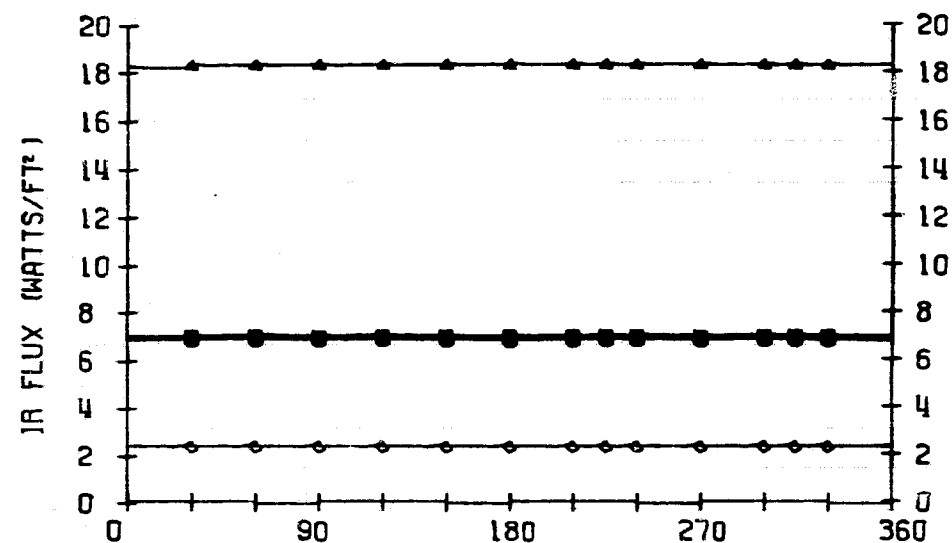
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	7.2	7.0	6.8	6.7	3.9	2.4
R	+Y (○)	7.2	6.8	6.6	5.8	6.1	4.5
F	+Z (△)	18.2	18.3	18.3	16.6	17.0	12.8
L	-X (+)	7.1	6.9	6.8	6.7	6.8	6.5
U	-Y (X)	7.2	7.0	6.7	5.8	6.1	4.5
X	-Z (◇)	2.6	2.3	2.2	3.0	1.8	2.2
U	+X (□)	9.8	14.0	18.6	5.6	15.4	5.2
V	+Y (○)	7.6	9.0	5.3	6.9	5.5	6.1
F	+Z (△)	10.9	11.0	10.9	6.4	11.7	6.8
L	-X (+)	9.3	13.5	15.9	5.2	18.2	5.1
U	-Y (X)	21.8	31.6	55.4	4.5	60.7	4.6
X	-Z (◇)	4.5	9.5	6.9	4.2	6.8	4.1

450 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1

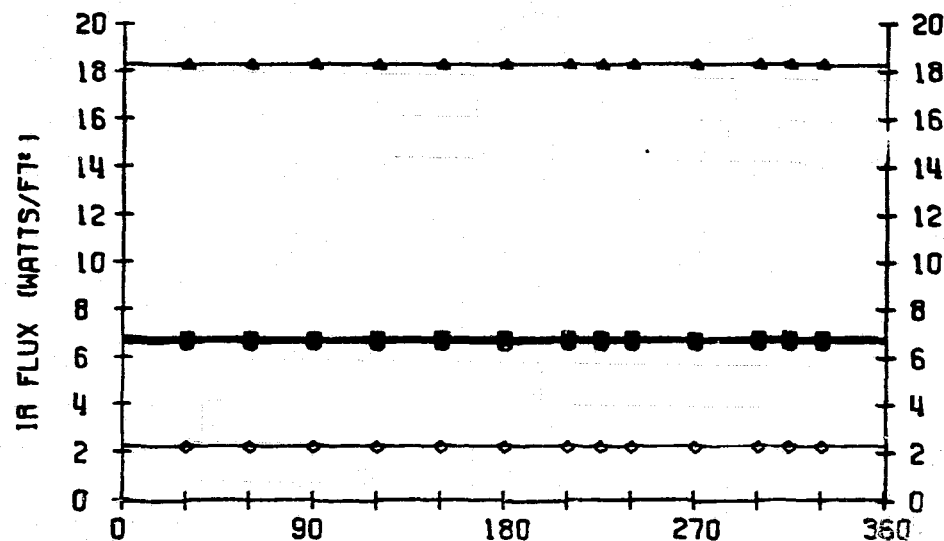


LOCATION 2

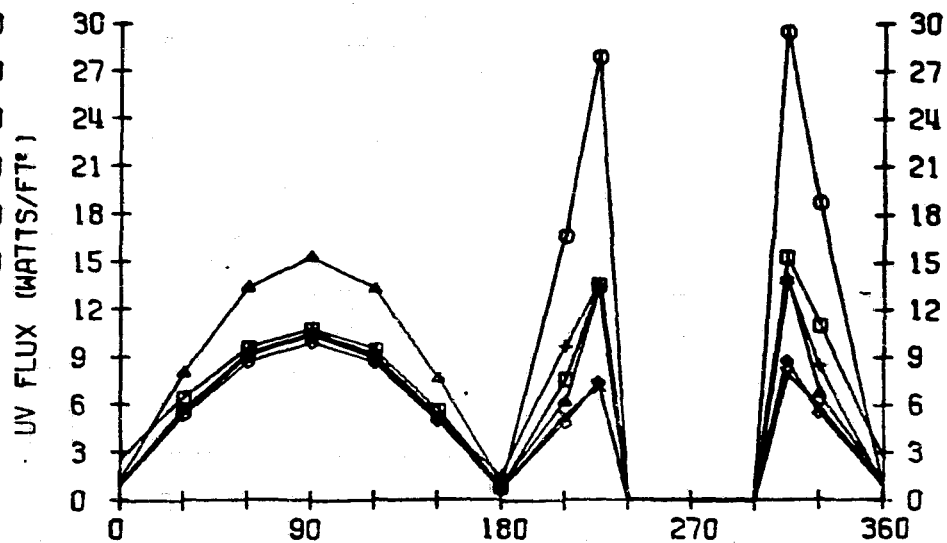
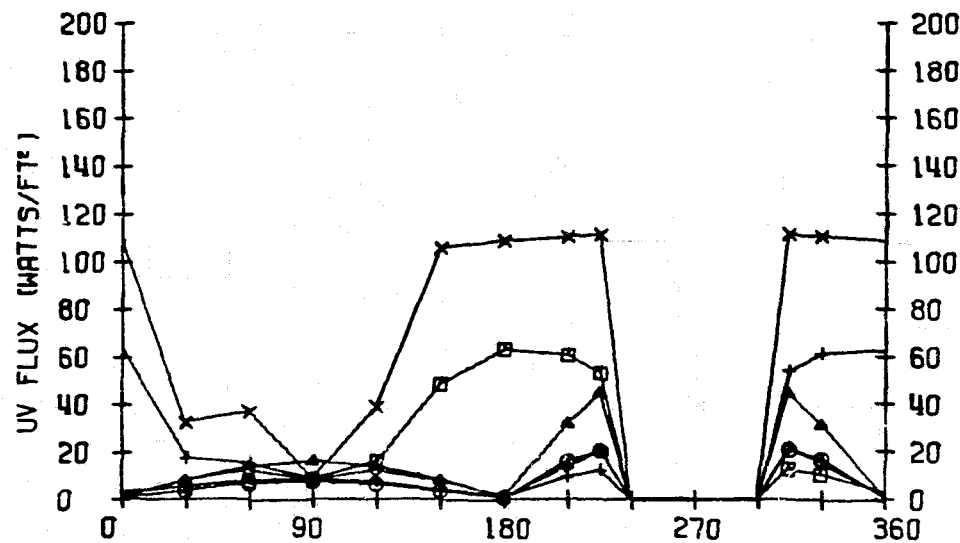
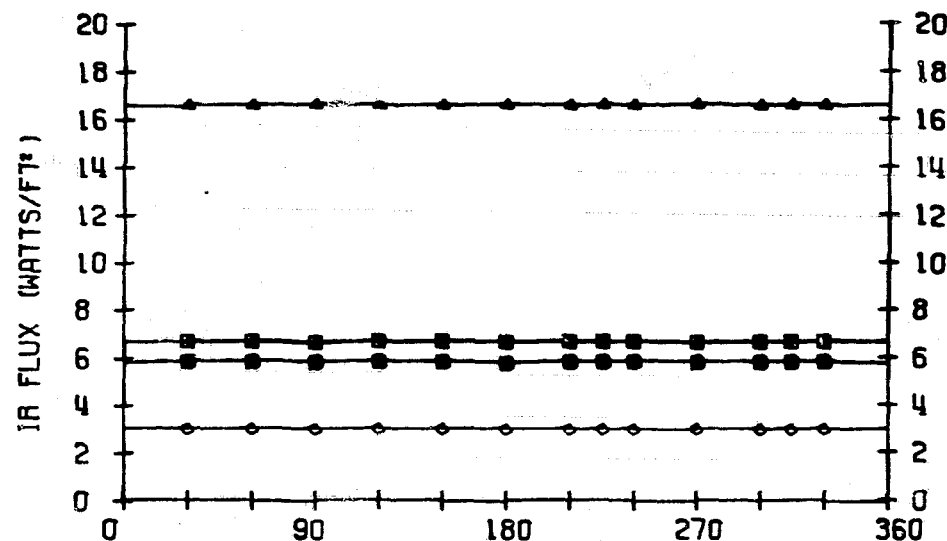


450 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3



LOCATION 4

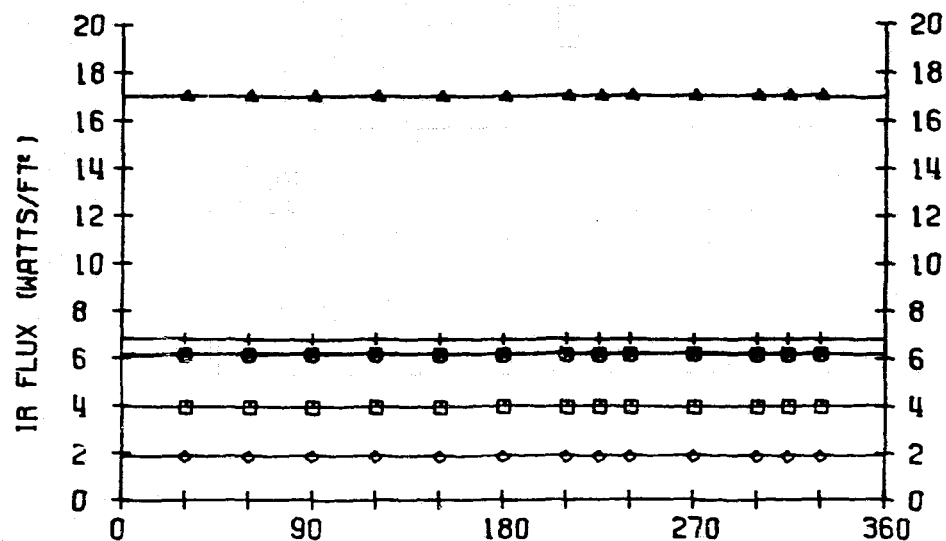


ORBIT POSITION (DEG)

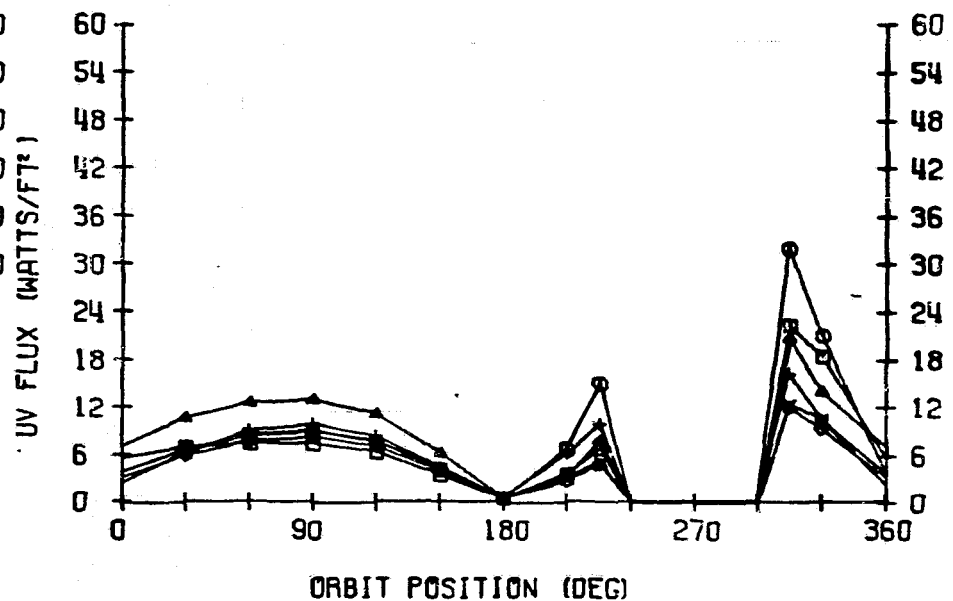
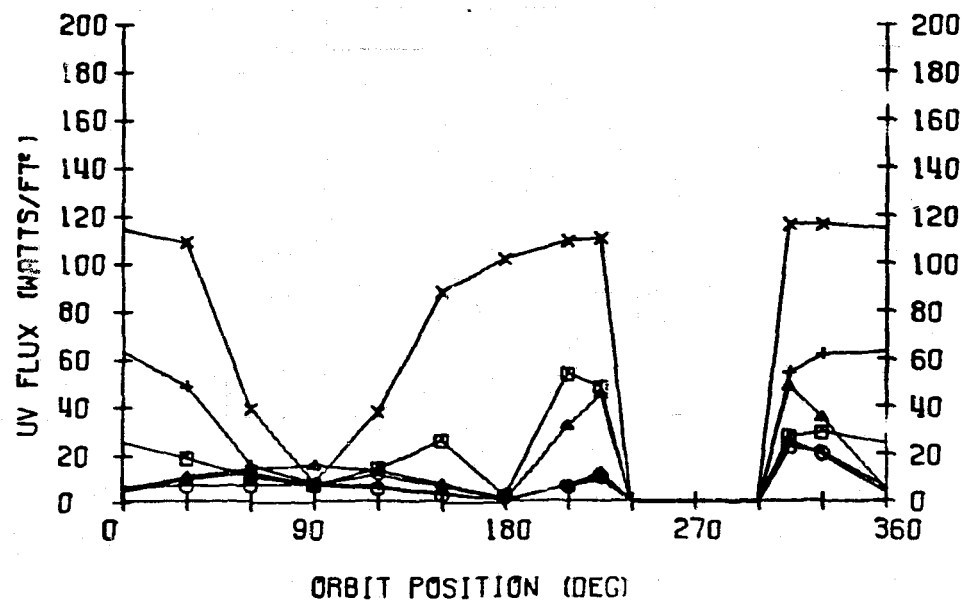
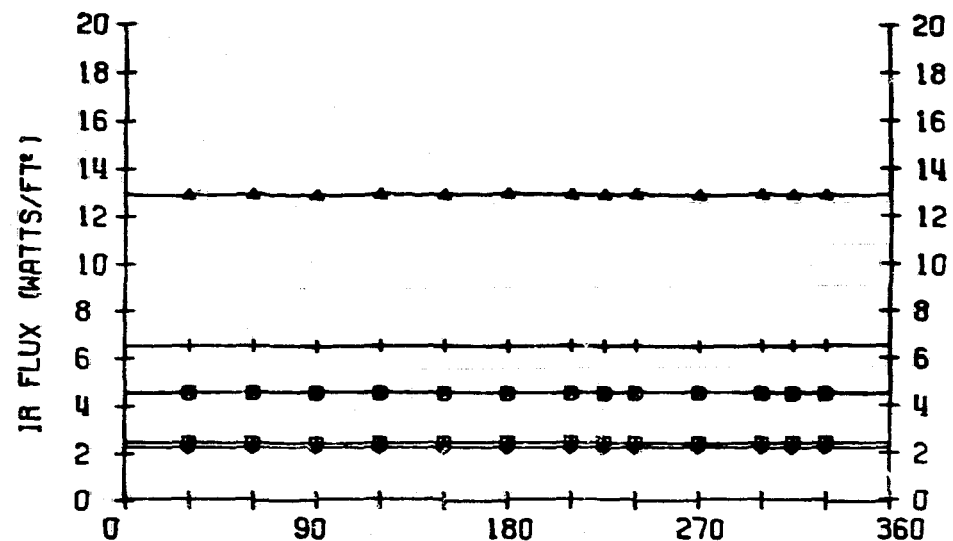
ORBIT POSITION (DEG)

450 KM * BETA=60 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM • BETA=60 DEG • +Z EARTH FACING • +X IN DIRECTION OF FLIGHT

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	13.4	12.8	9.5	16.6	16.1	20.5
R	+Y (○)	14.8	13.5	8.4	18.9	9.7	19.4
F	+Z (△)	0.3	0.2	0.2	3.6	2.0	7.8
L	-X (+)	13.2	12.7	10.4	16.0	9.3	15.9
U	-Y (×)	12.8	10.4	7.5	17.5	8.9	18.6
X	-Z (◇)	21.1	24.2	20.7	22.2	21.2	22.3

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

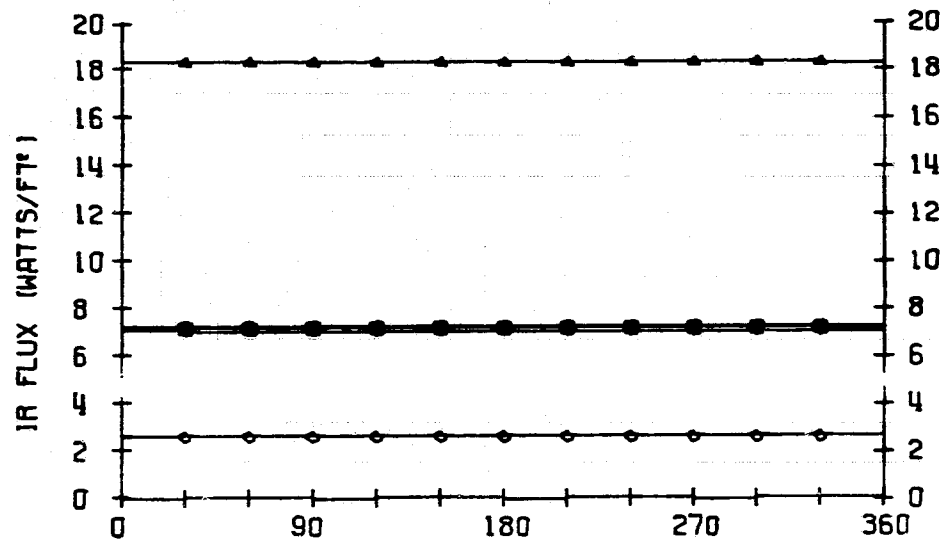
FOR

450 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

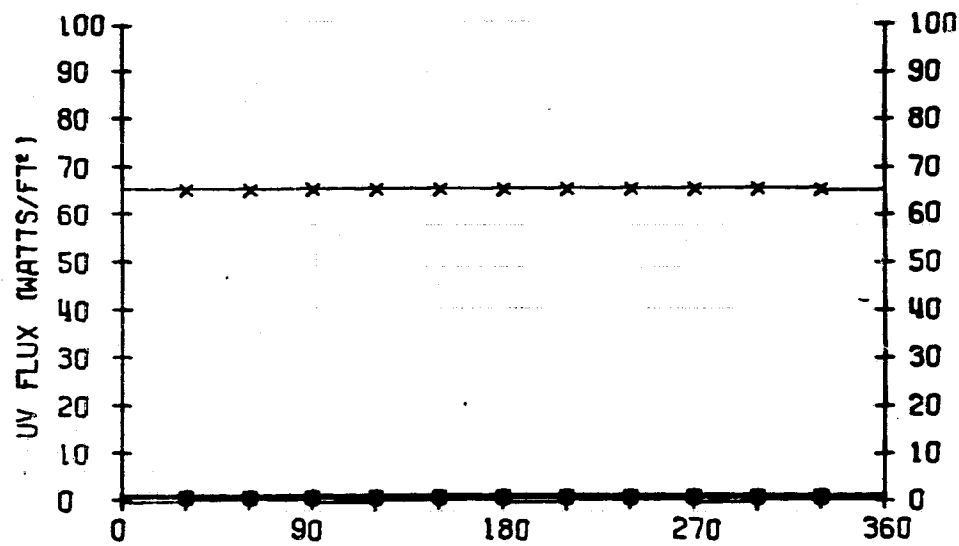
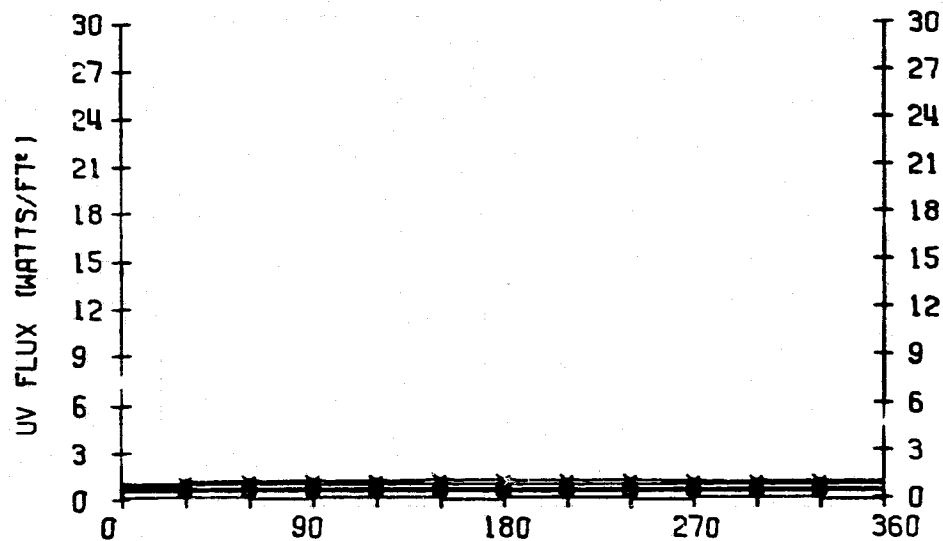
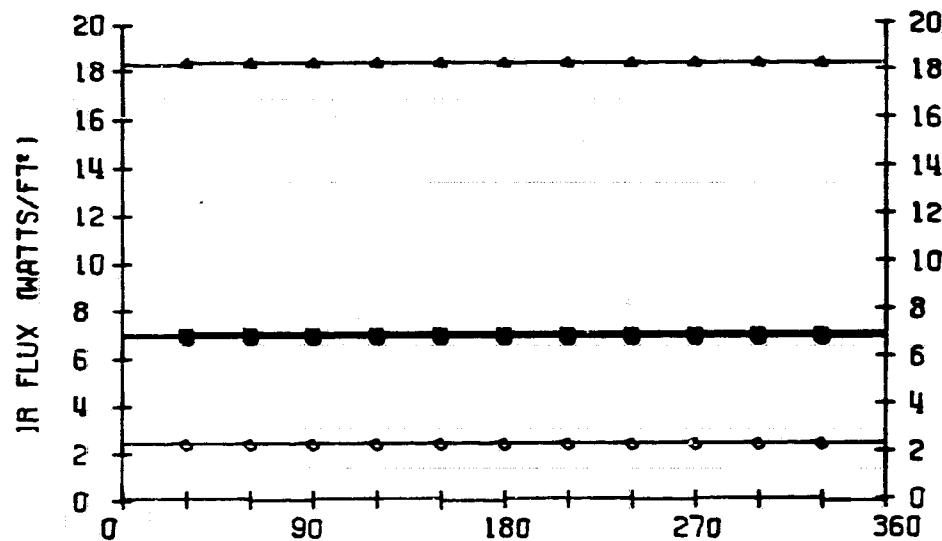
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	7.1	6.9	6.8	6.6	3.9	2.4
R	+Y (○)	7.2	6.8	6.6	5.8	6.1	4.5
F	+Z (△)	18.2	18.3	18.3	16.6	17.0	12.8
L	-X (+)	7.0	6.9	6.8	6.7	6.8	6.5
U	-Y (X)	7.2	7.0	6.7	5.8	6.1	4.5
X	-Z (◇)	2.6	2.3	2.2	3.0	1.8	2.2
U	+X (□)	0.5	0.6	0.5	0.5	0.4	0.4
V	+Y (○)	0.5	0.4	0.3	0.5	0.2	0.4
F	+Z (△)	0.8	0.8	0.8	0.7	0.8	0.6
L	-X (+)	0.5	0.6	0.5	0.5	0.5	0.5
U	-Y (X)	1.0	65.2	125.4	0.6	125.3	0.5
X	-Z (◇)	0.4	0.6	0.4	0.4	0.4	0.3

450 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1



LOCATION 2

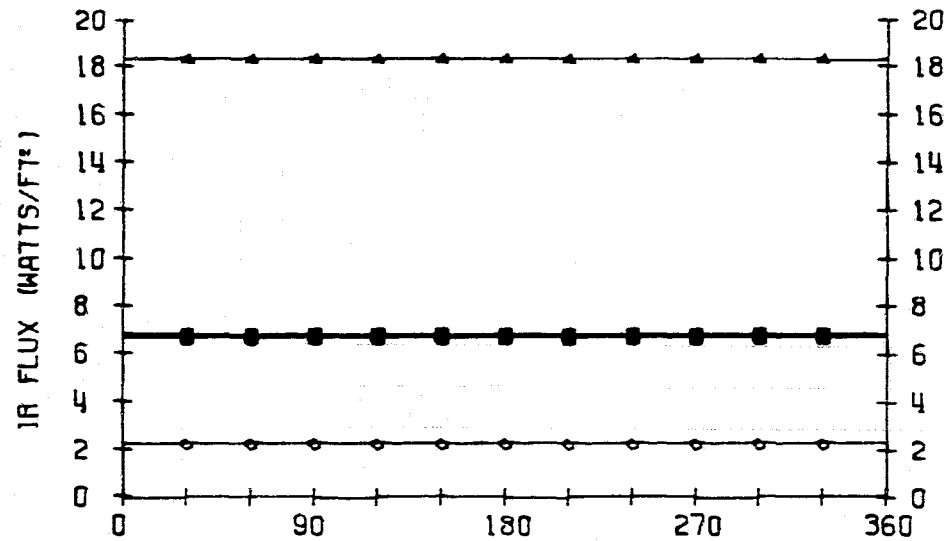


ORBIT POSITION (DEG)

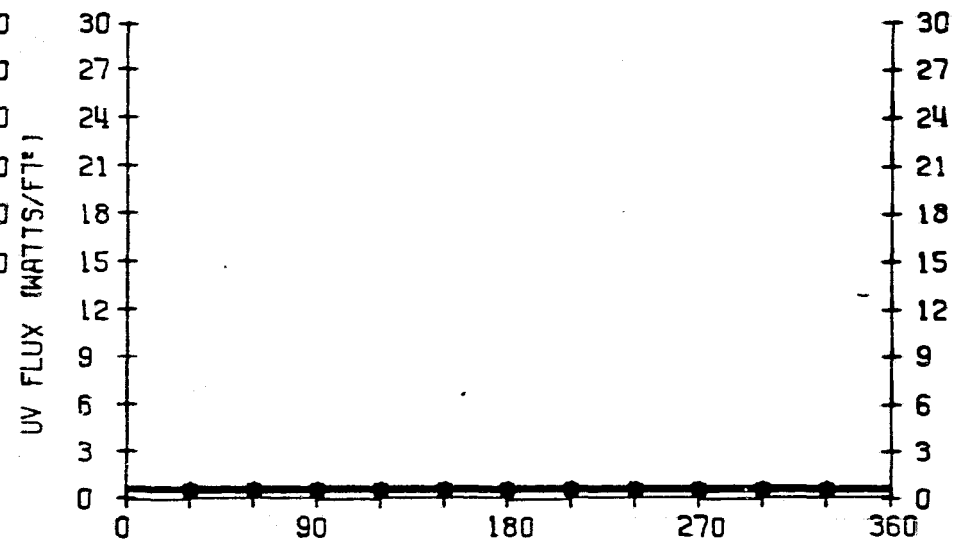
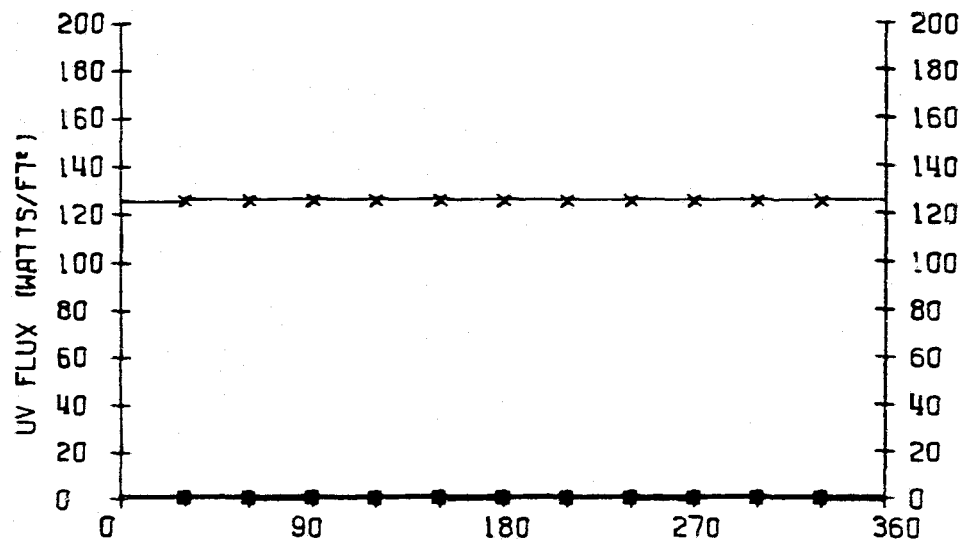
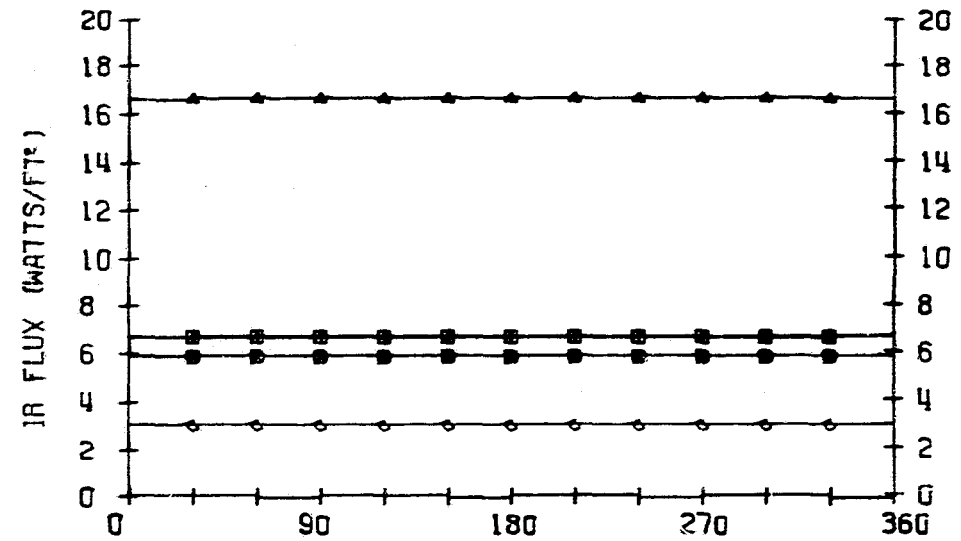
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3



LOCATION 4

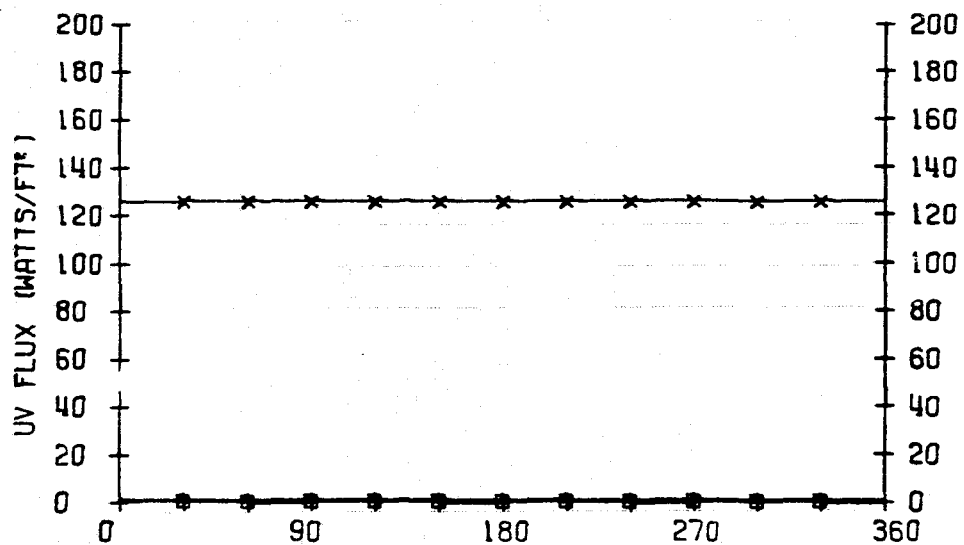
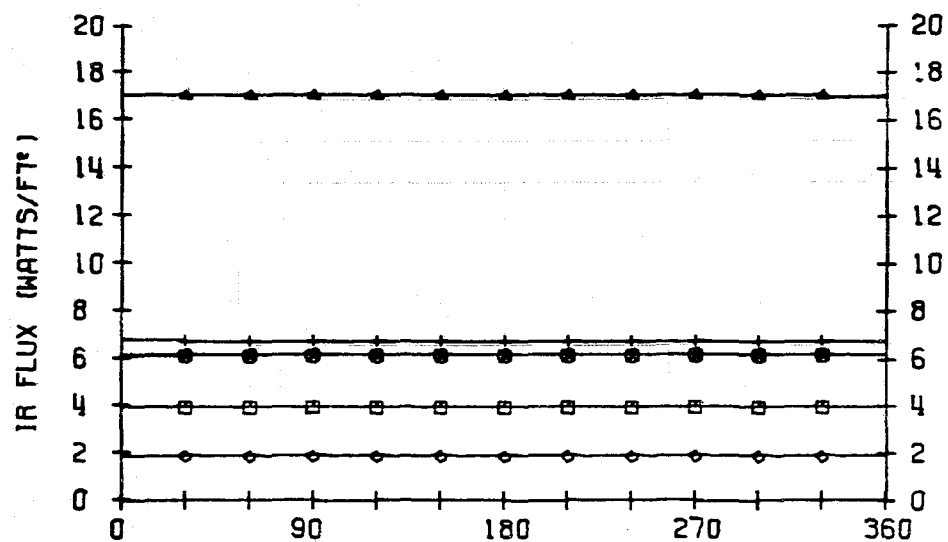


ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

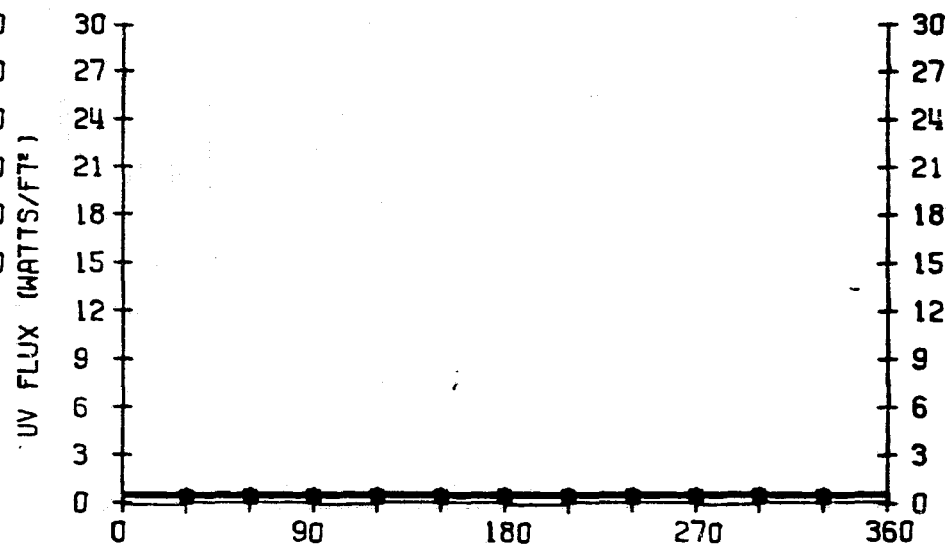
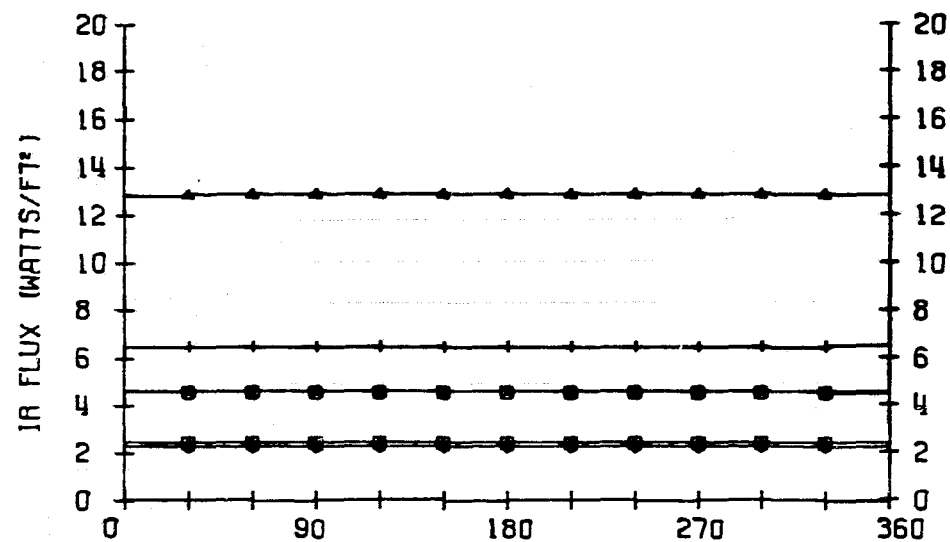
450 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



ORBIT POSITION (DEG)

LOCATION 6



ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	9.7	8.5	6.8	12.5	10.5	14.2
R	+Y (○)	9.8	8.0	5.6	13.7	6.2	13.5
F	+Z (△)	0.2	0.2	0.1	2.6	1.3	5.1
L	-X (+)	9.5	8.5	7.5	12.0	6.7	11.6
U	-Y (X)	9.8	8.0	5.8	13.7	6.3	13.5
X	-Z (◇)	16.4	16.4	15.4	17.8	15.0	16.6

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

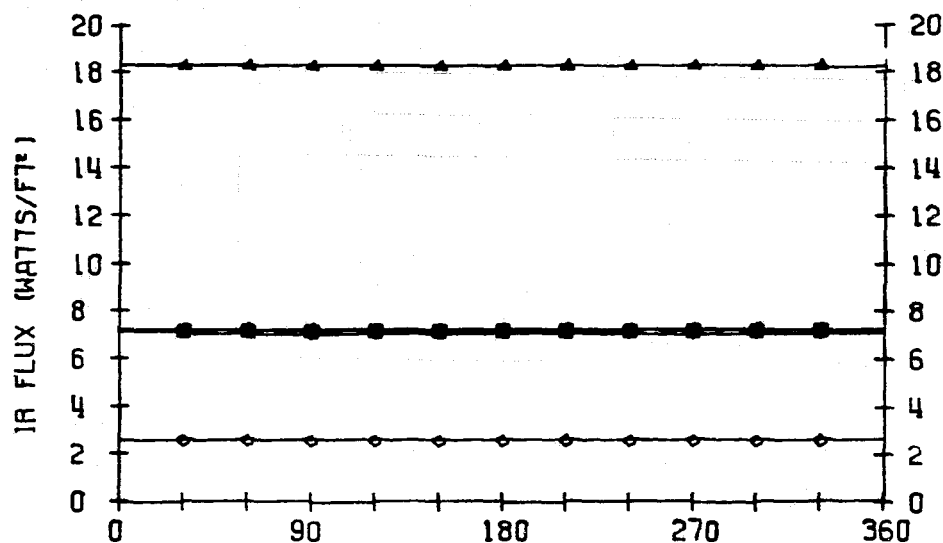
FOR

450 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

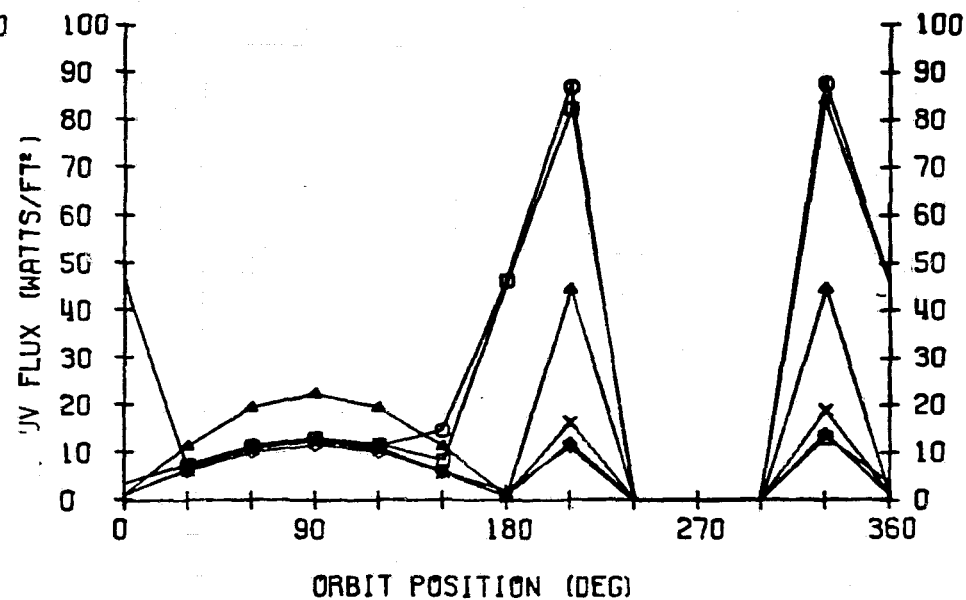
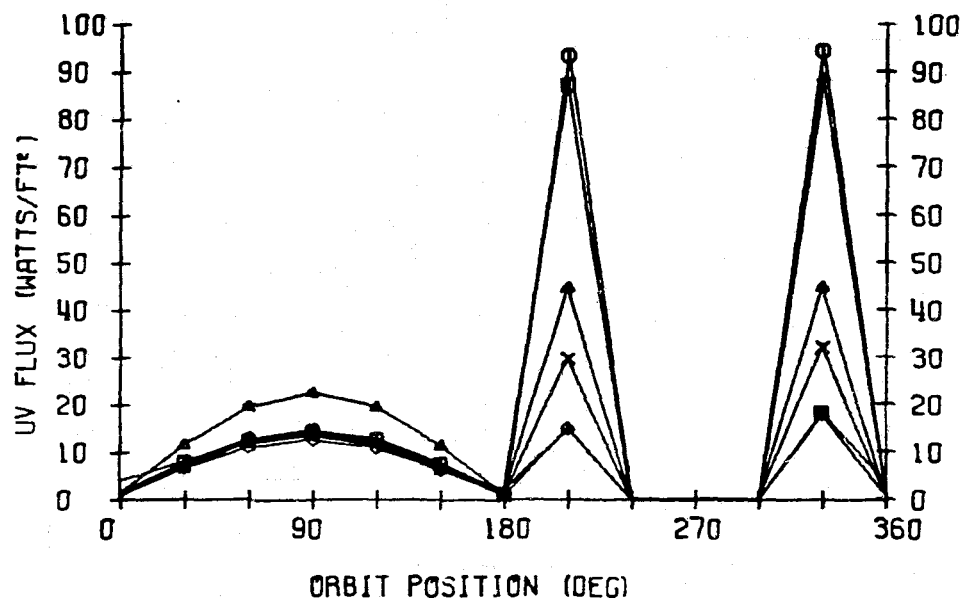
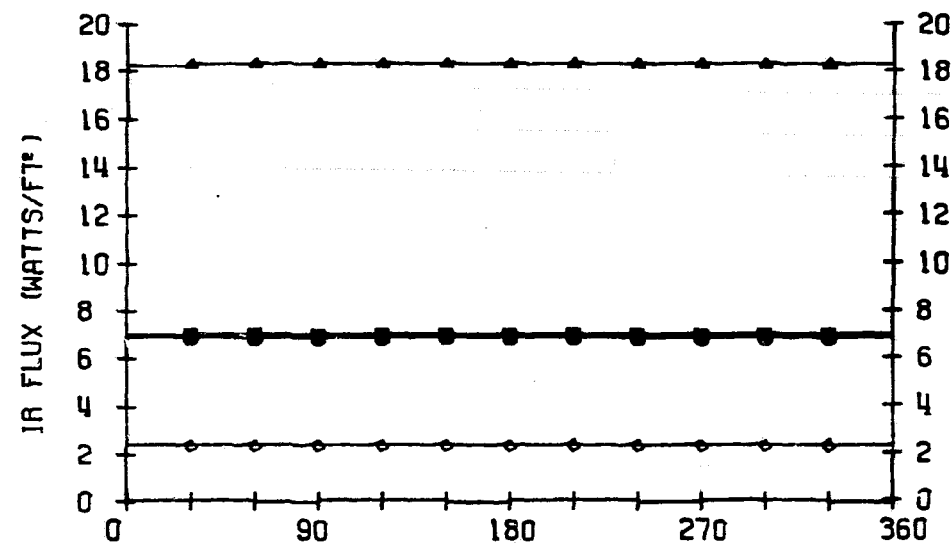
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	7.2	7.0	6.8	6.7	3.9	2.4
R	+Y (○)	7.2	6.8	6.6	5.8	6.1	4.5
F	+Z (△)	18.2	18.3	18.3	16.6	17.0	12.8
L	-X (+)	7.1	6.9	6.8	6.7	6.8	6.5
U	-Y (X)	7.2	7.0	6.7	5.8	6.1	4.5
X	-Z (◇)	2.6	2.3	2.2	3.0	1.8	2.2
U	+X (□)	9.4	12.4	17.5	7.4	10.6	5.8
V	+Y (○)	12.6	19.8	29.1	7.2	21.9	6.1
F	+Z (△)	10.9	10.8	10.8	8.8	10.7	8.5
L	-X (+)	8.9	12.0	15.6	7.0	17.1	6.7
U	-Y (X)	7.0	5.5	5.1	7.2	5.5	6.3
X	-Z (◇)	5.4	4.8	5.5	5.5	5.4	5.0

450 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 1

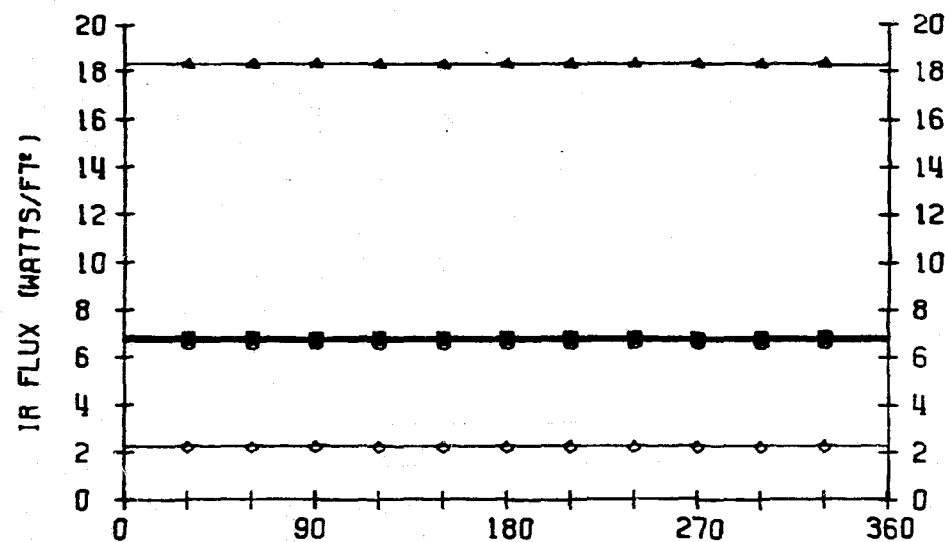


LOCATION 2

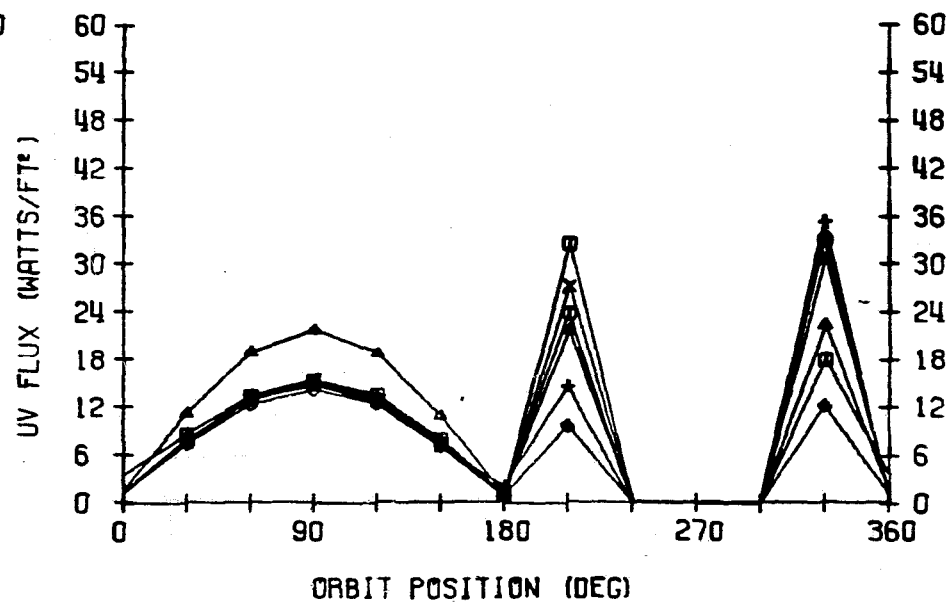
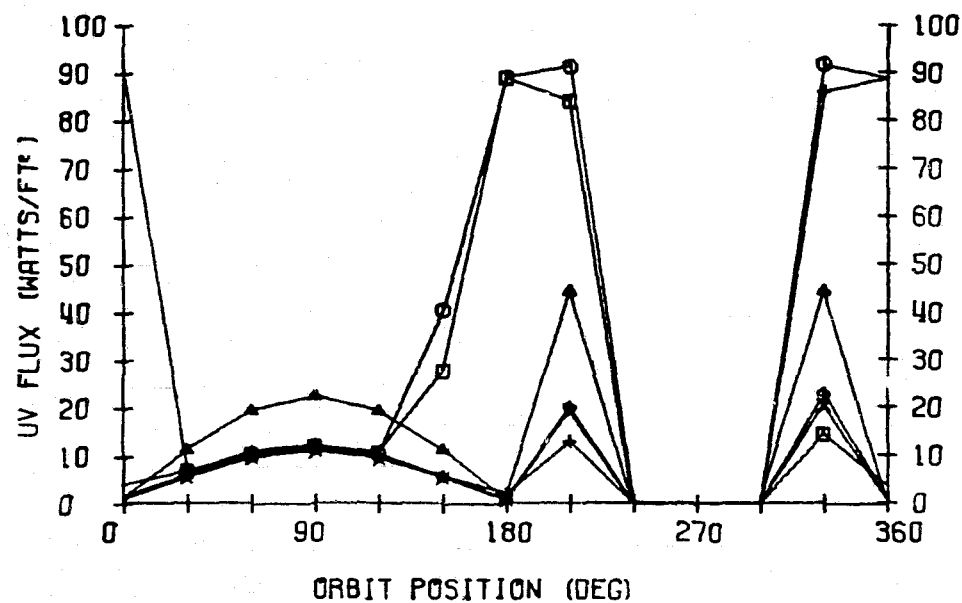
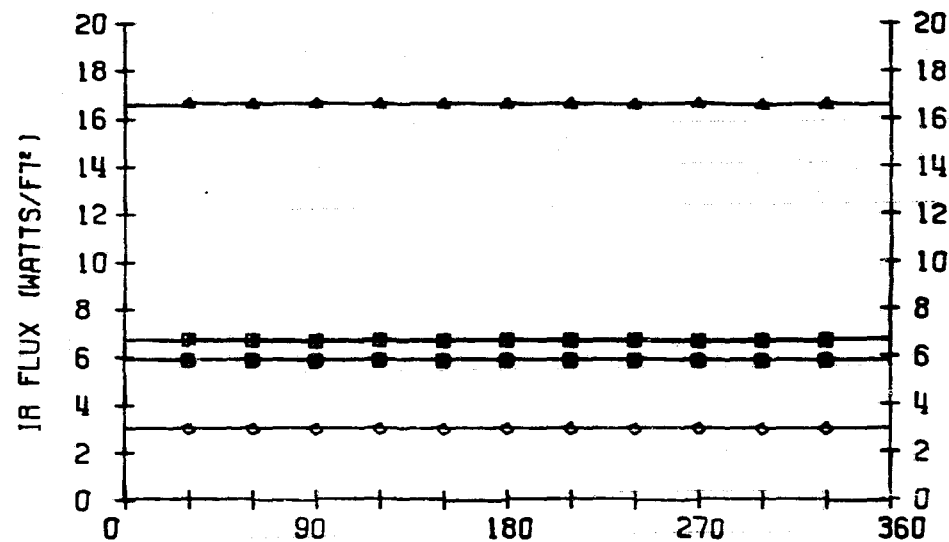


450 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 3

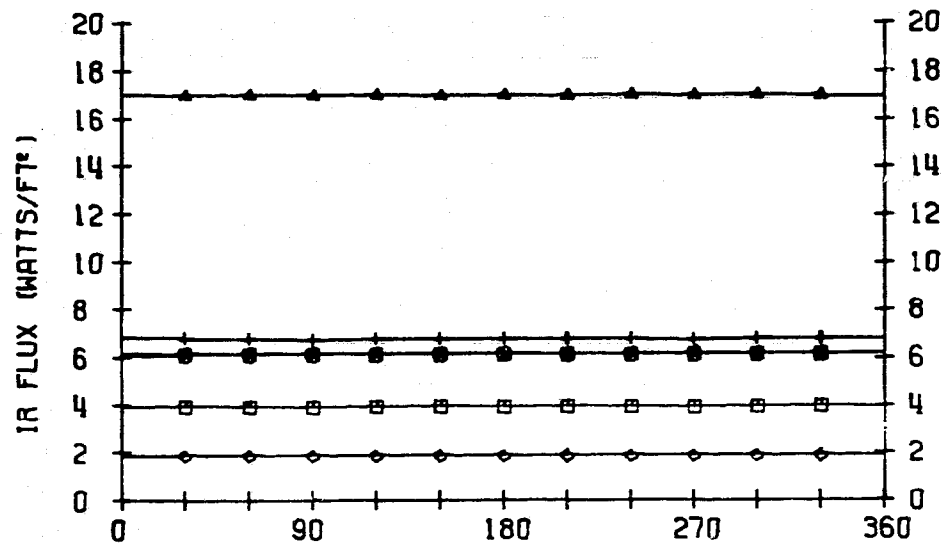


LOCATION 4

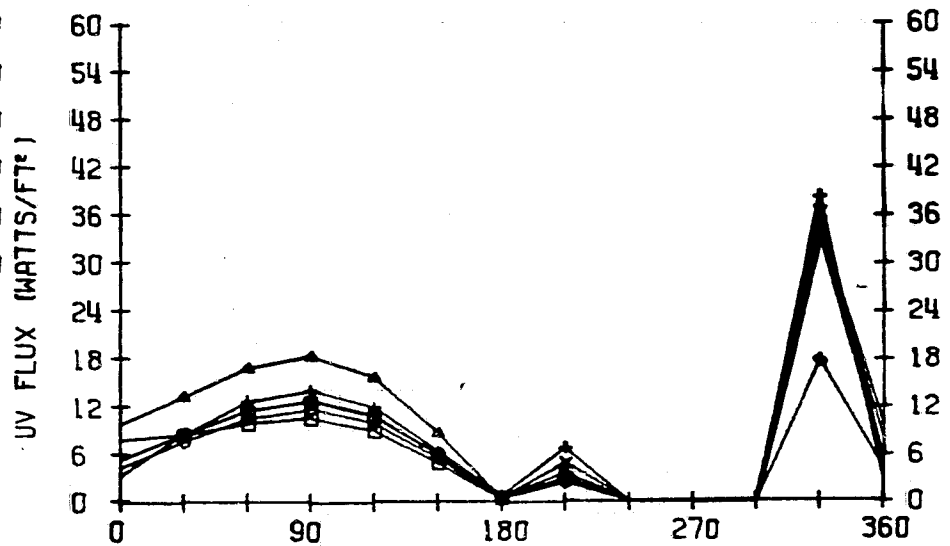
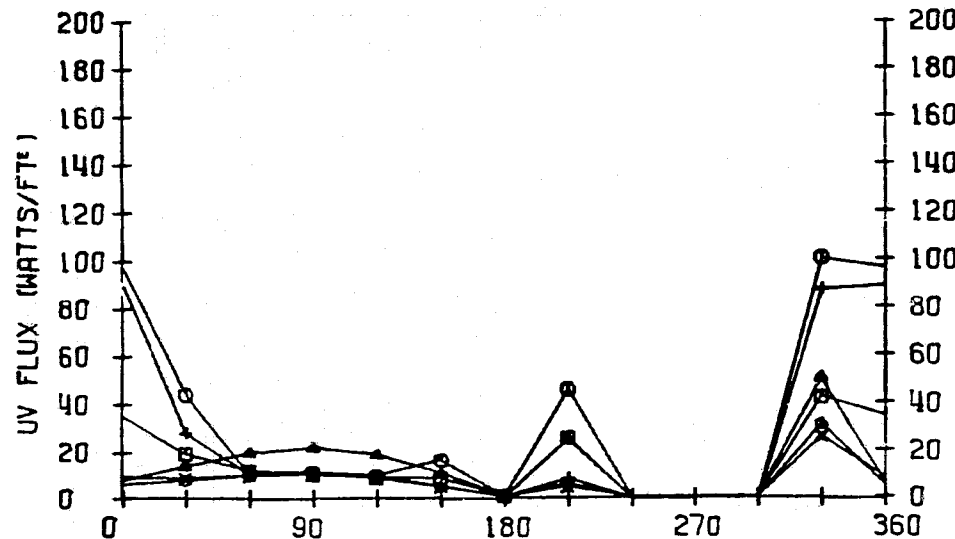
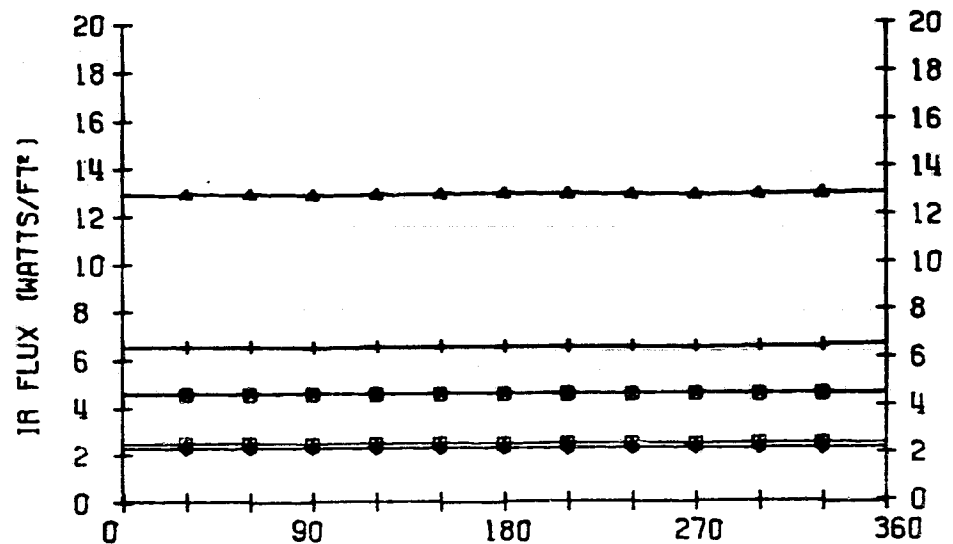


450 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=-45 DEG * +Z EARTH FACING * -X IN DIRECTION OF FLIGHT

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	13.8	12.0	9.8	17.2	16.8	21.4
R	+Y (○)	13.3	11.0	7.5	18.3	9.2	19.3
F	+Z (△)	0.3	0.2	0.2	3.9	2.1	8.0
L	-X (+)	13.6	12.1	10.7	16.6	9.5	16.4
U	-Y (X)	14.8	11.6	8.7	19.5	9.7	19.9
X	-Z (◇)	22.1	22.3	21.4	23.2	21.5	23.3

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 8a

Passive thermal control (PTC), bay towards sun at true anomaly = 0°

Beta angles - 0° , 45° , 90°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

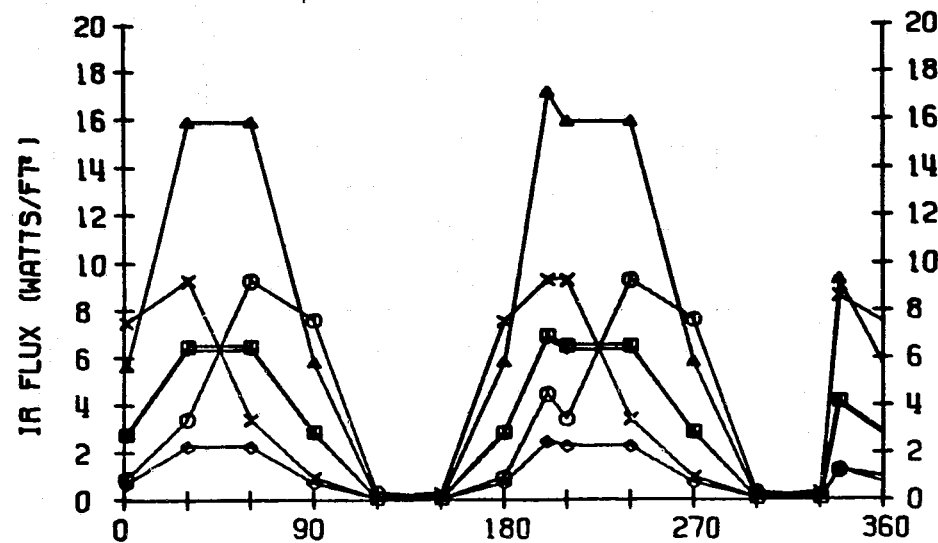
FOR

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

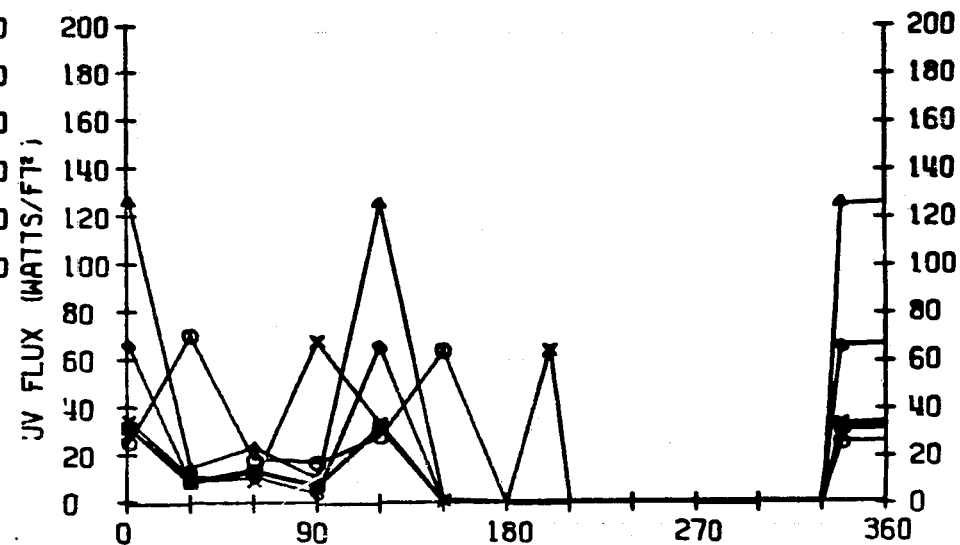
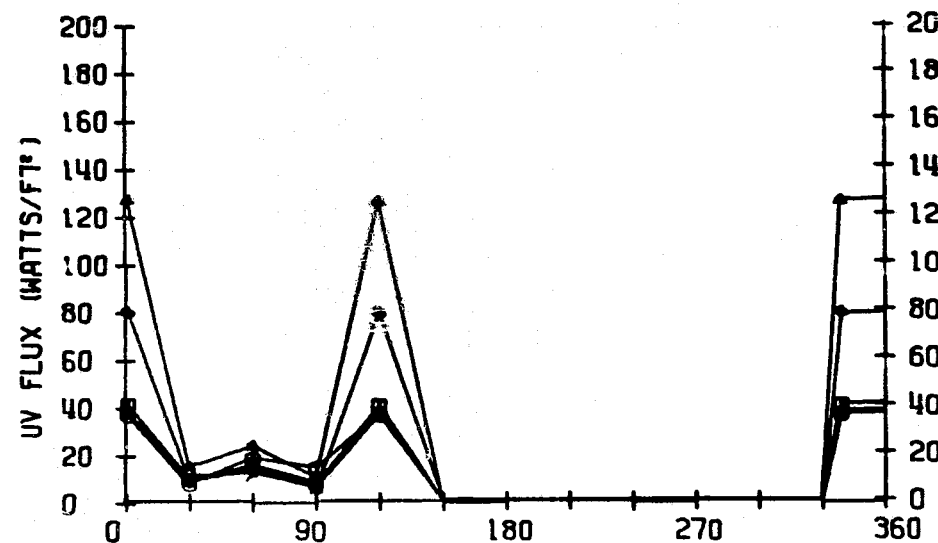
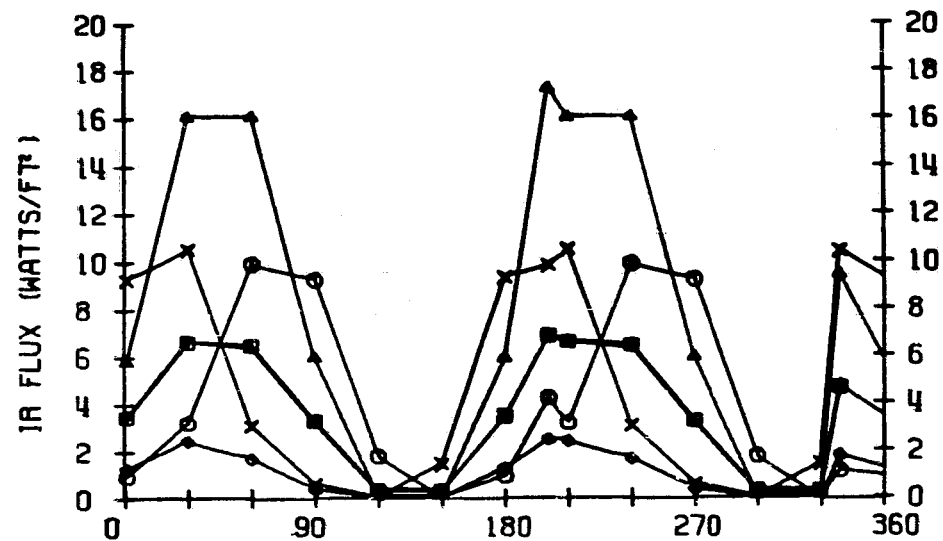
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.4	3.9	2.4	2.1	1.0
R	+Y (○)	3.7	4.3	5.5	2.3	5.1	1.8
F	+Z (Δ)	7.3	7.4	7.4	6.3	6.9	5.0
L	-X (+)	3.1	3.4	3.8	2.5	3.9	2.4
U	-Y (x)	3.4	3.9	5.0	2.2	4.6	1.8
X	-Z (◇)	1.0	0.9	1.1	1.1	0.9	0.9
U	+X (□)	8.8	7.4	6.9	11.1	5.4	10.2
V	+Y (○)	8.9	18.7	29.4	11.5	29.0	11.6
F	+Z (Δ)	22.6	22.7	22.6	23.4	22.7	23.6
L	-X (+)	8.2	7.3	7.4	10.3	7.3	11.1
U	-Y (x)	7.9	14.7	20.1	11.4	19.7	11.5
X	-Z (◇)	13.9	11.6	12.1	16.5	11.6	16.6

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 1



LOCATION 2

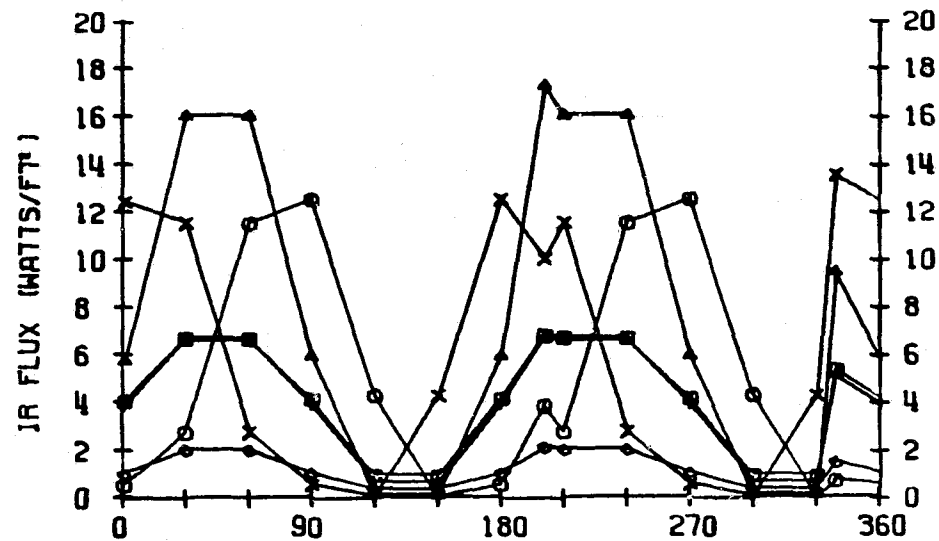


ORBIT POSITION (DEG)

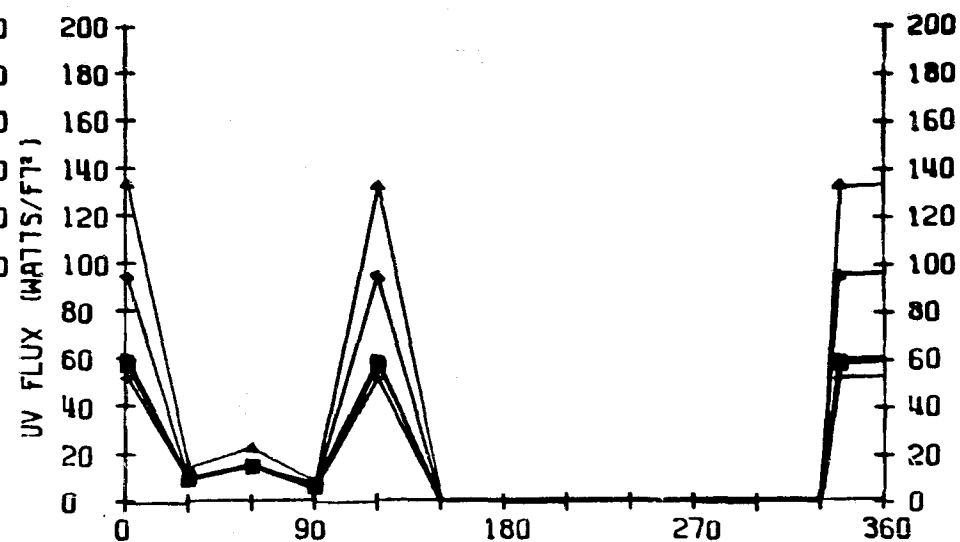
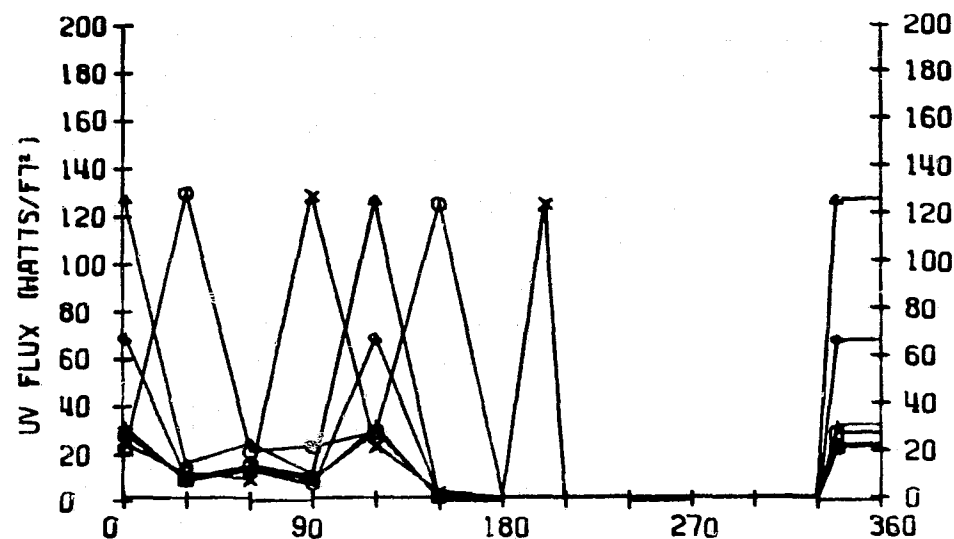
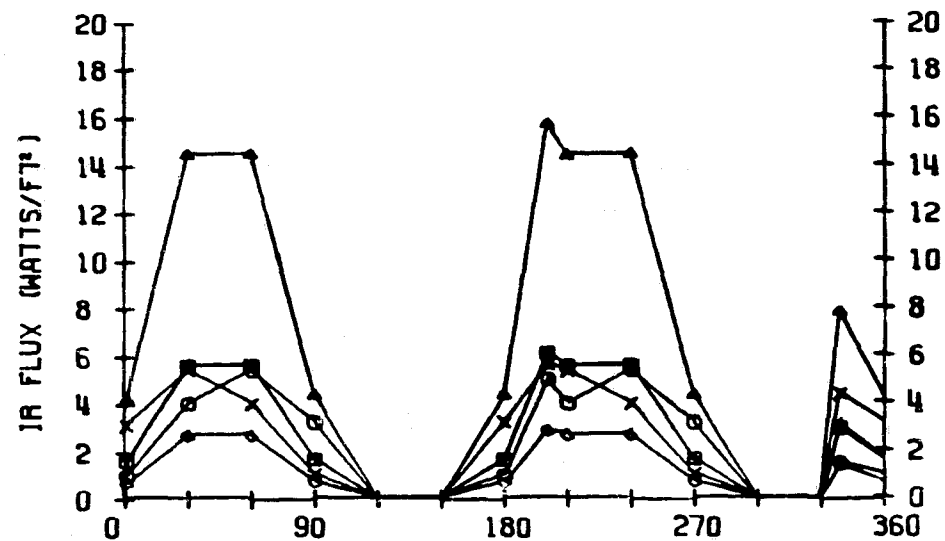
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 3



LOCATION 4

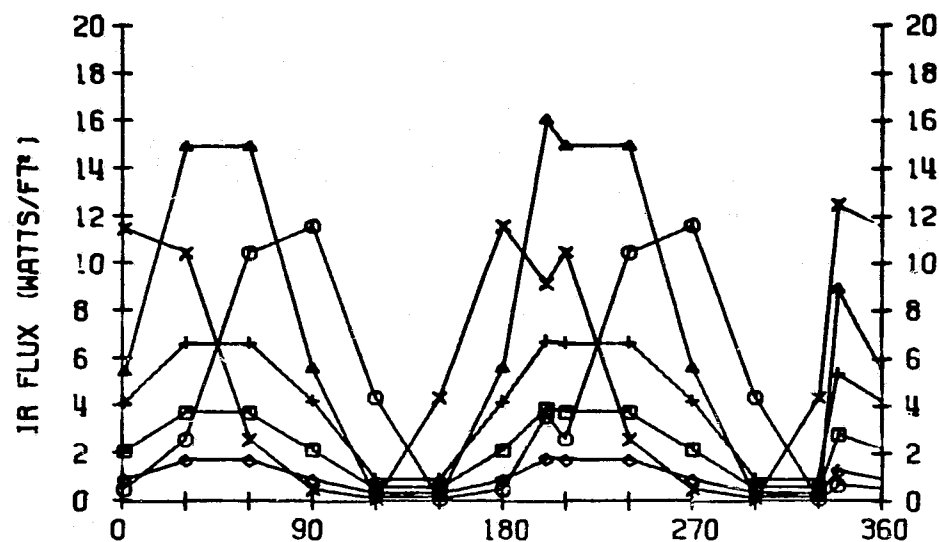


ORBIT POSITION (DEG)

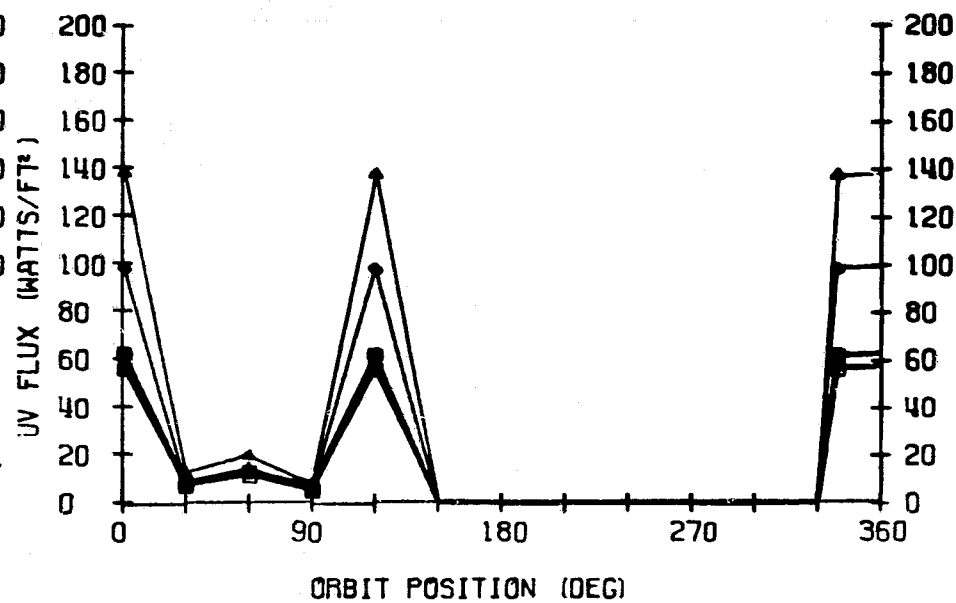
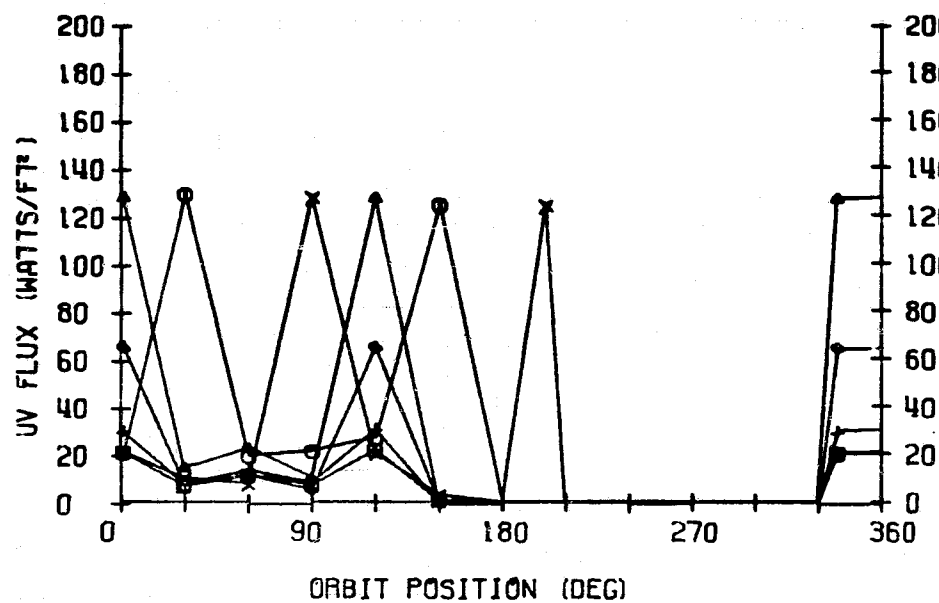
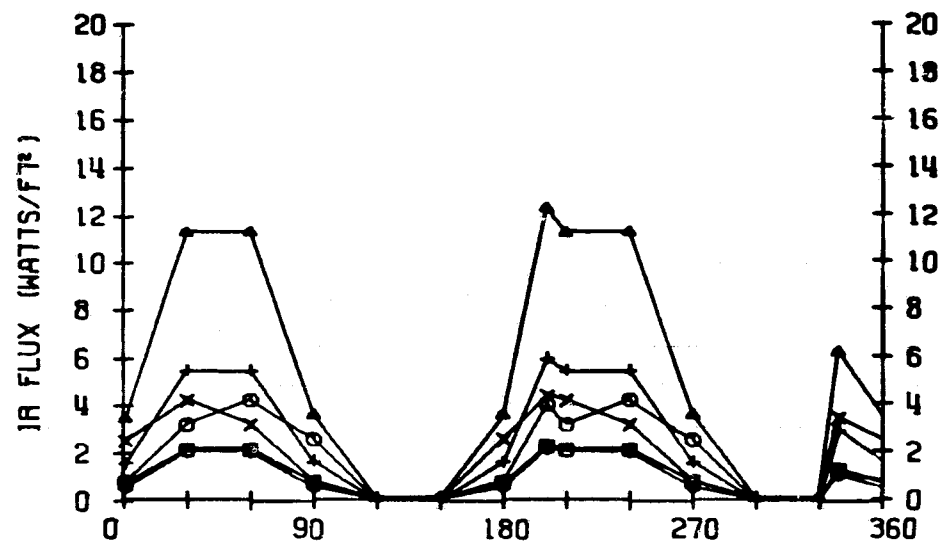
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	10.7	9.3	7.5	13.8	11.7	16.8
R	+Y (○)	10.5	8.5	5.8	14.8	7.0	16.2
F	+Z (△)	0.2	0.2	0.1	2.8	1.4	5.7
L	-X (+)	10.7	9.4	8.2	13.3	7.4	13.9
U	-Y (×)	10.7	8.9	6.1	14.9	7.1	16.4
X	-Z (◇)	18.0	17.8	16.9	19.7	17.7	21.2

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

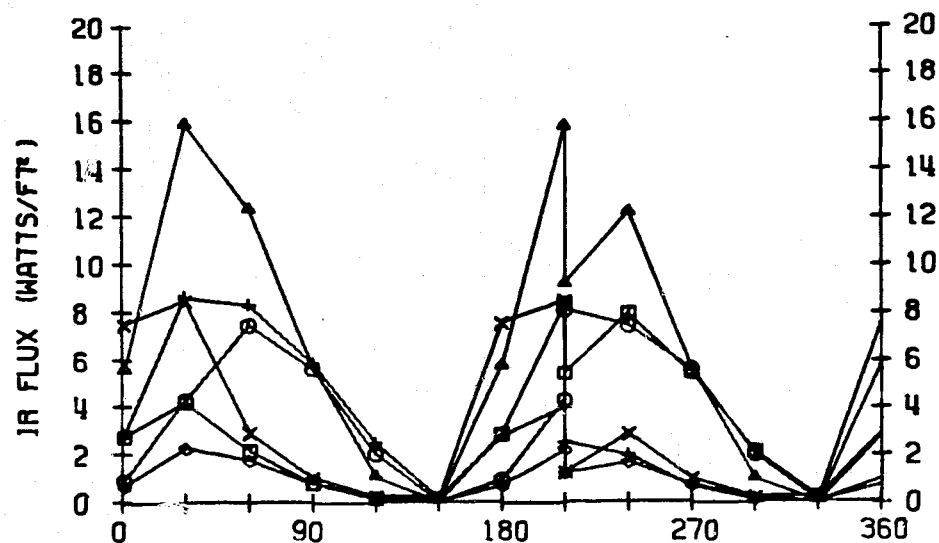
FOR

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

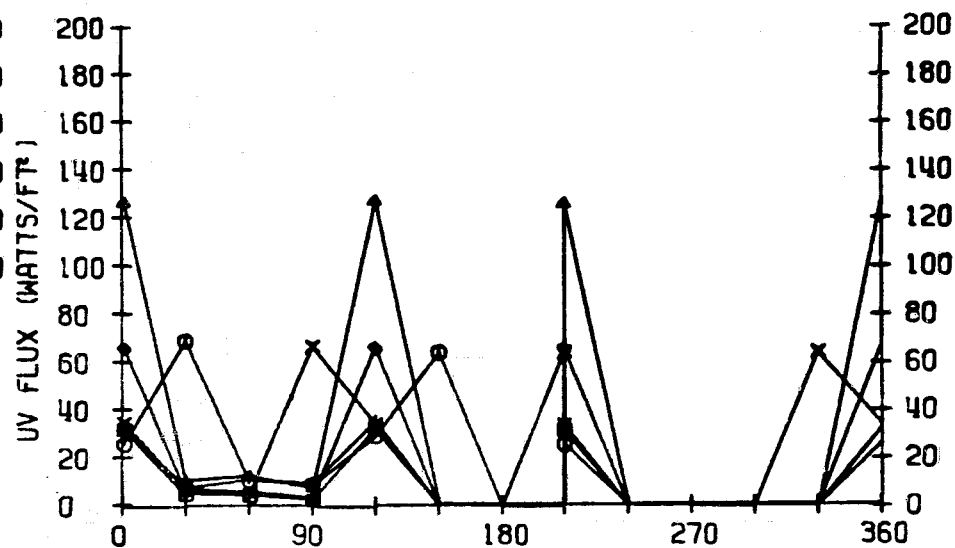
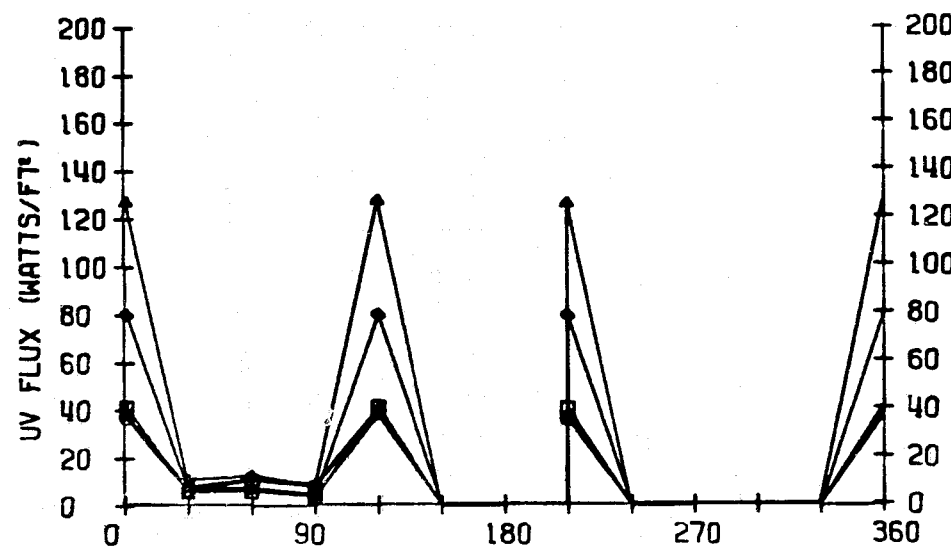
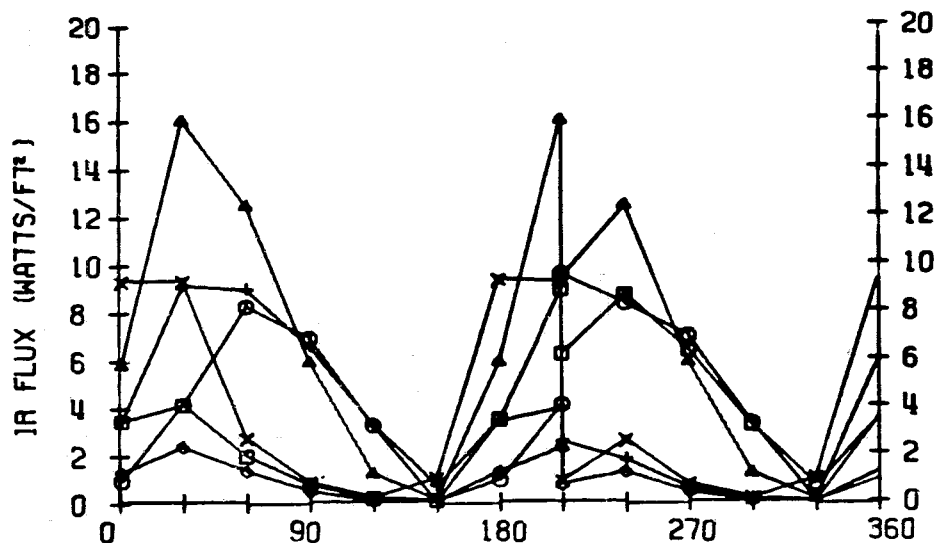
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.5	4.0	2.3	2.0	0.9
R	+Y (○)	3.5	4.1	5.1	2.2	4.8	1.8
F	+Z (Δ)	6.8	6.9	6.9	5.8	6.4	4.7
L	-X (+)	3.2	3.5	4.1	2.5	4.2	2.5
U	-Y (x)	3.2	3.6	4.5	2.1	4.1	1.6
X	-Z (◇)	0.9	0.9	1.0	1.0	0.9	0.8
U	+X (□)	6.6	5.2	4.6	8.9	4.8	9.2
V	+Y (○)	7.0	16.9	27.3	9.6	27.5	10.2
F	+Z (Δ)	19.1	19.1	19.1	19.8	19.5	20.8
L	-X (+)	7.6	7.0	7.4	9.2	7.4	10.3
U	-Y (x)	6.4	17.0	26.0	9.5	26.0	10.1
X	-Z (◇)	11.8	9.9	10.2	14.0	10.3	14.6

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 1



LOCATION 2



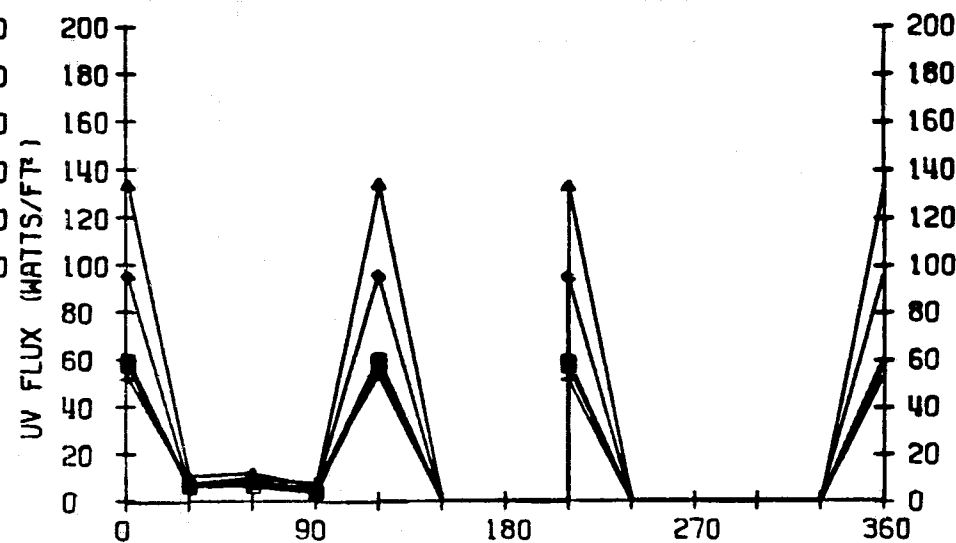
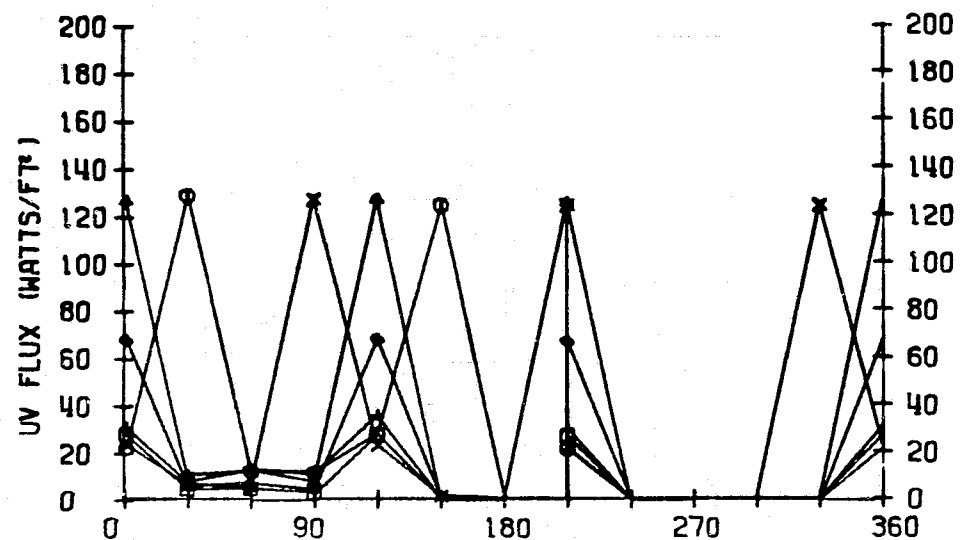
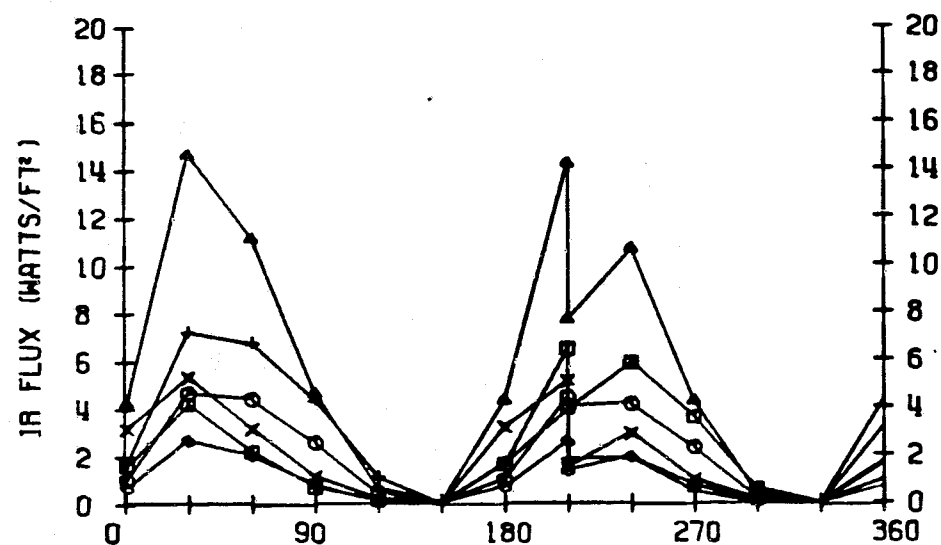
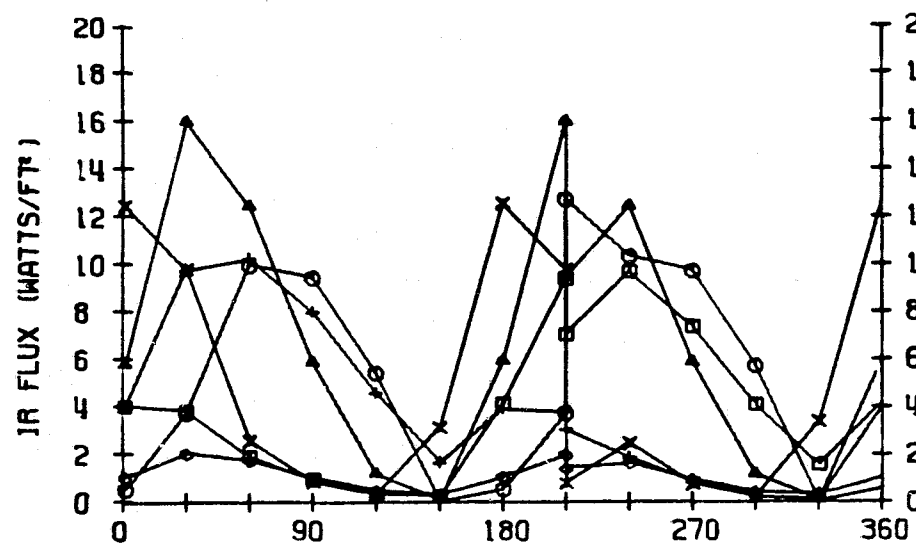
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 3

LOCATION 4

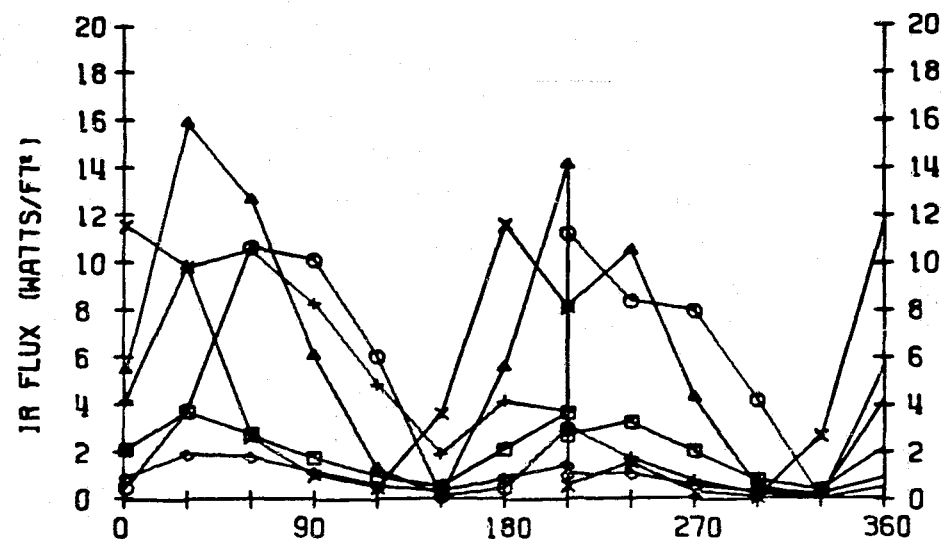


ORBIT POSITION (DEG)

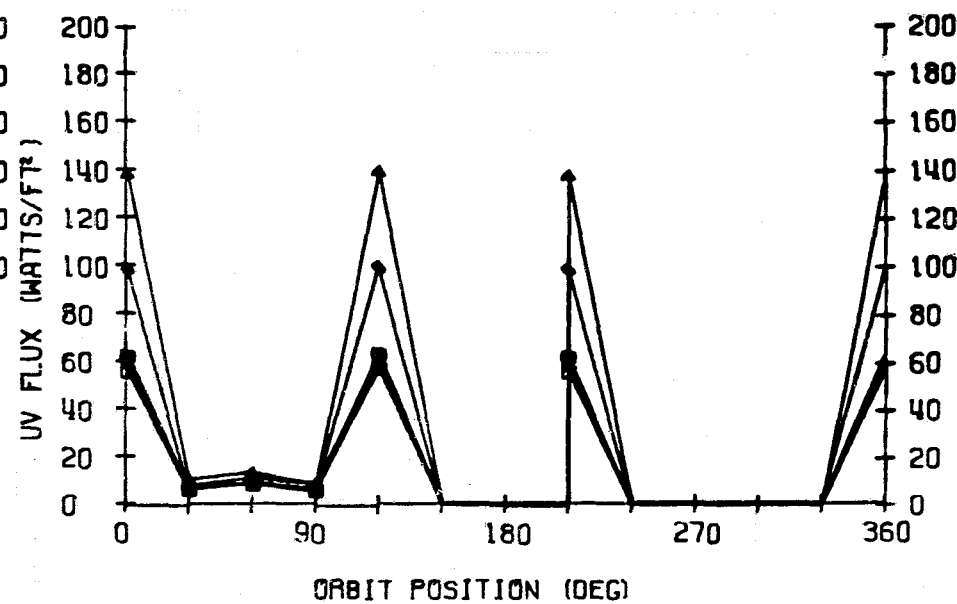
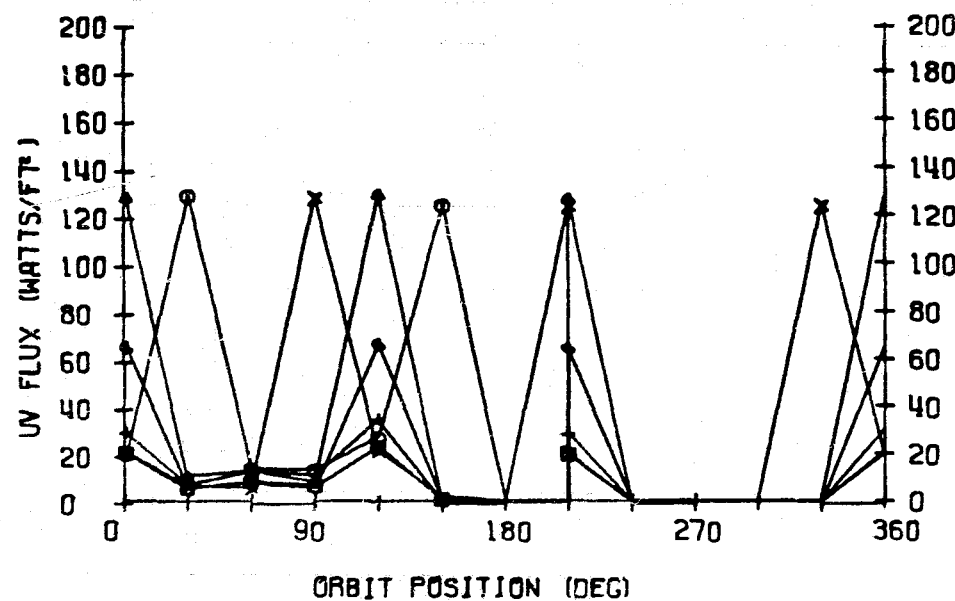
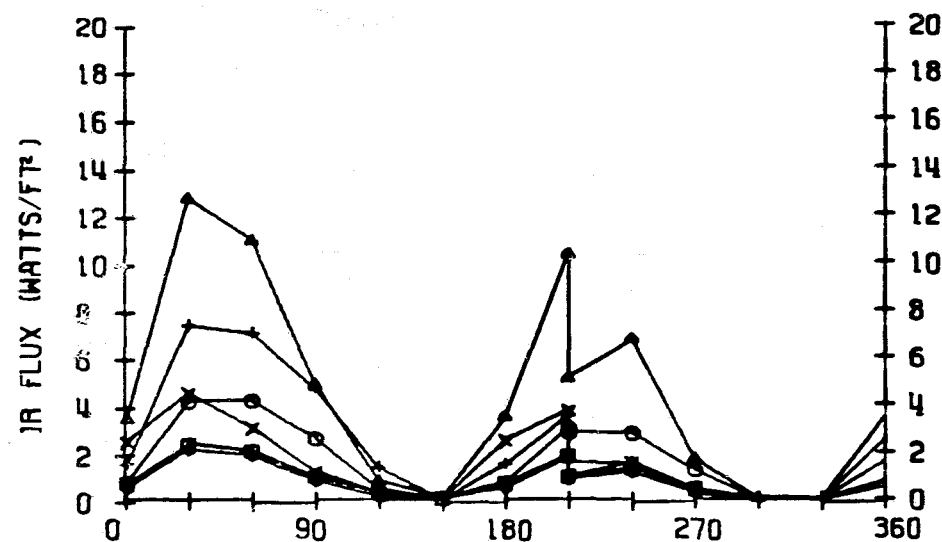
ORBIT POSITION (DEG)

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	10.7	9.2	7.5	13.7	12.3	17.5
R	+Y (○)	10.3	8.2	5.6	14.5	7.2	16.7
F	+Z (Δ)	0.2	0.2	0.1	2.7	1.5	6.0
L	-X (+)	10.5	9.2	8.1	13.1	7.4	14.2
U	-Y (x)	10.6	8.8	6.0	14.8	7.4	17.0
X	-Z (◇)	17.8	17.5	16.7	19.5	18.2	21.9

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

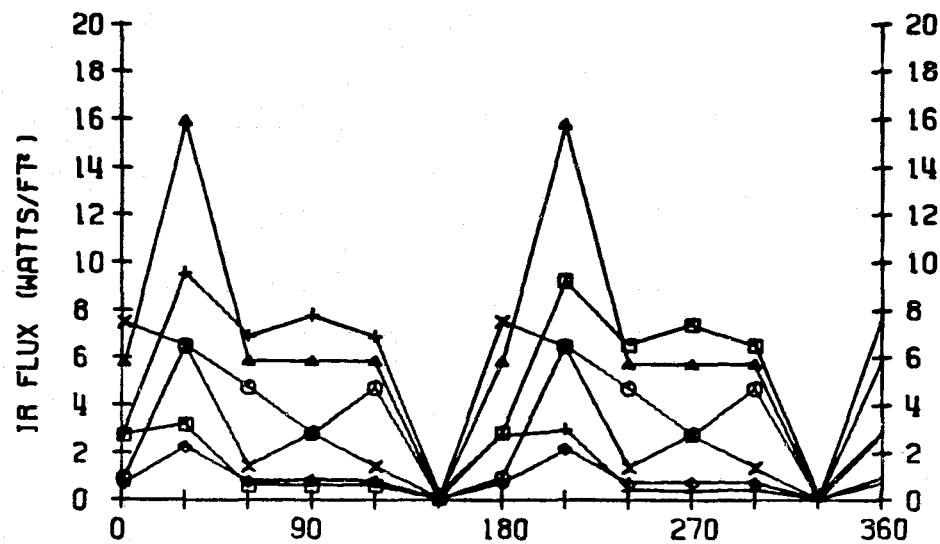
FOR

450 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

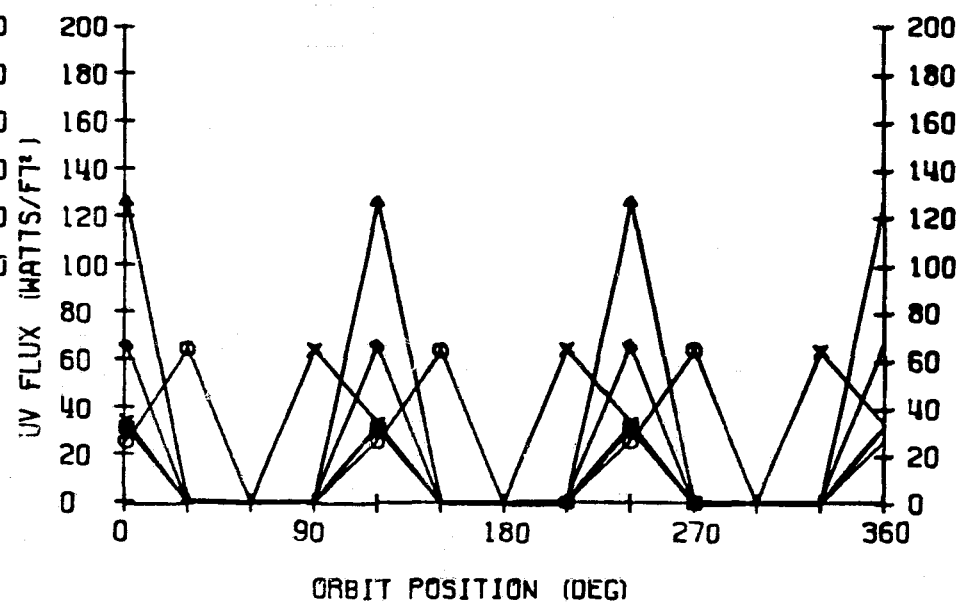
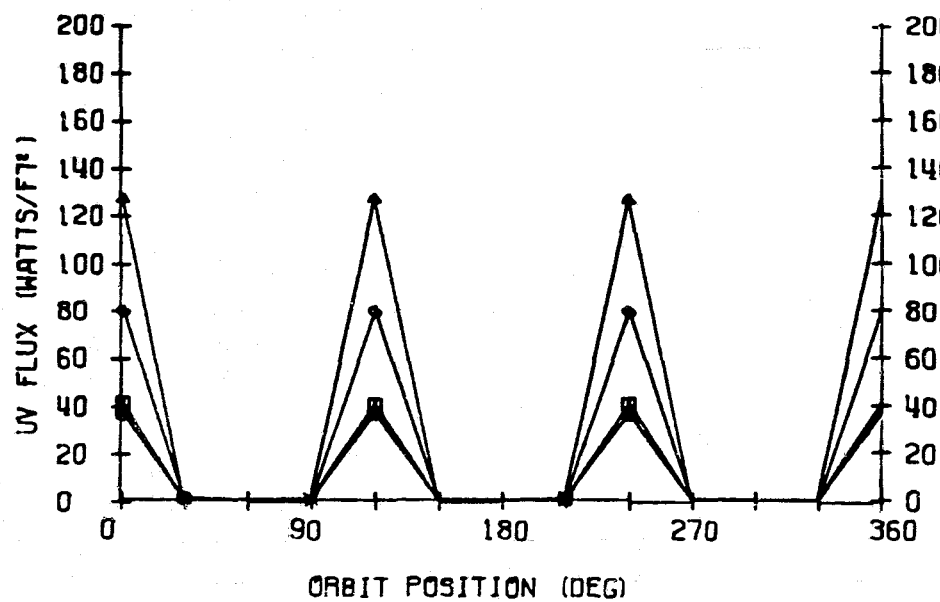
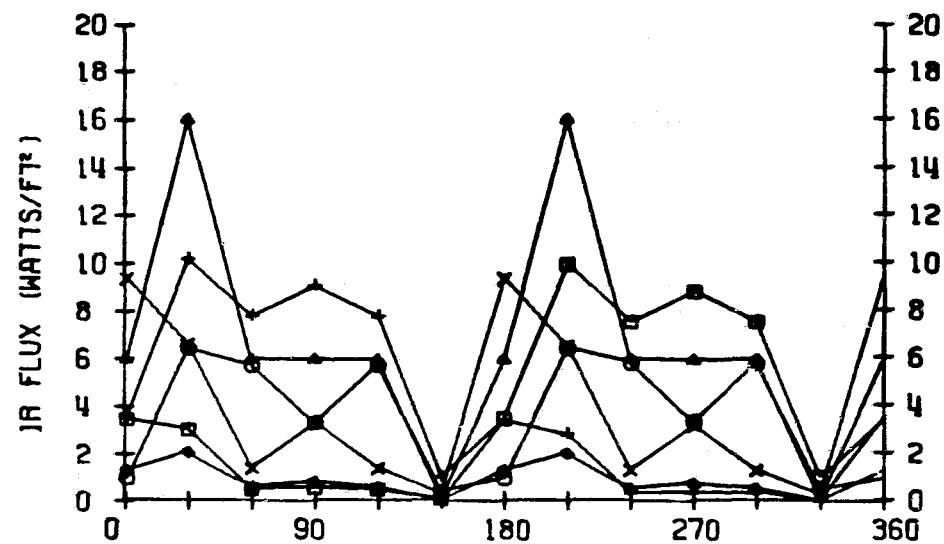
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.4	3.9	4.4	2.4	2.0	0.9
R	+Y (○)	3.4	3.9	4.8	2.1	4.3	1.6
F	+Z (Δ)	6.5	6.6	6.6	5.5	6.0	4.2
L	-X (+)	3.5	3.9	4.6	2.7	4.7	2.7
U	-Y (x)	3.1	3.4	4.1	2.0	3.6	1.6
X	-Z (◇)	0.9	0.8	1.0	1.0	0.8	0.7
U	+X (□)	9.0	7.1	6.1	12.6	4.7	12.3
V	+Y (○)	8.2	22.5	37.3	13.2	37.0	13.7
F	+Z (Δ)	27.7	27.6	27.6	29.2	28.0	30.1
L	-X (+)	8.4	7.1	6.9	11.6	6.7	12.8
U	-Y (x)	8.2	24.3	37.6	13.2	37.1	13.7
X	-Z (◇)	17.4	14.4	14.8	20.8	14.3	21.5

450 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 1

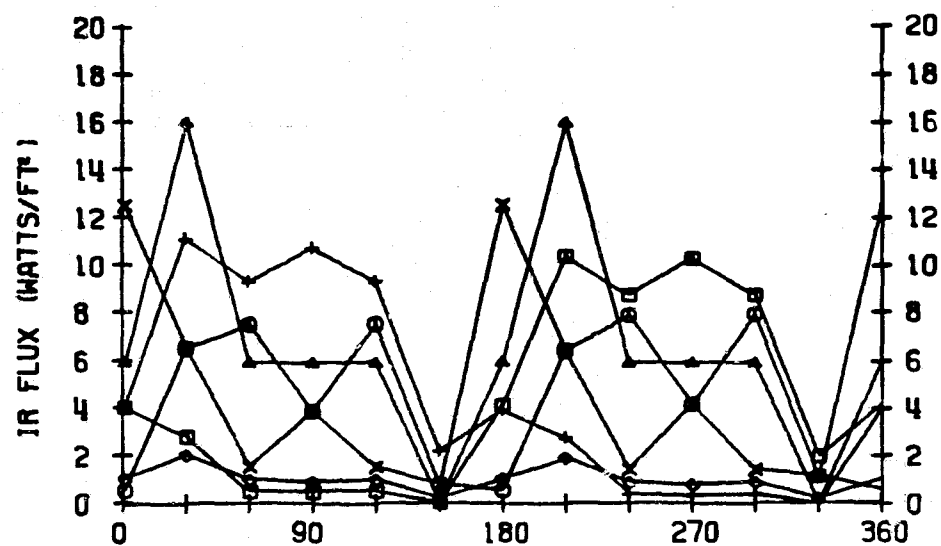


LOCATION 2

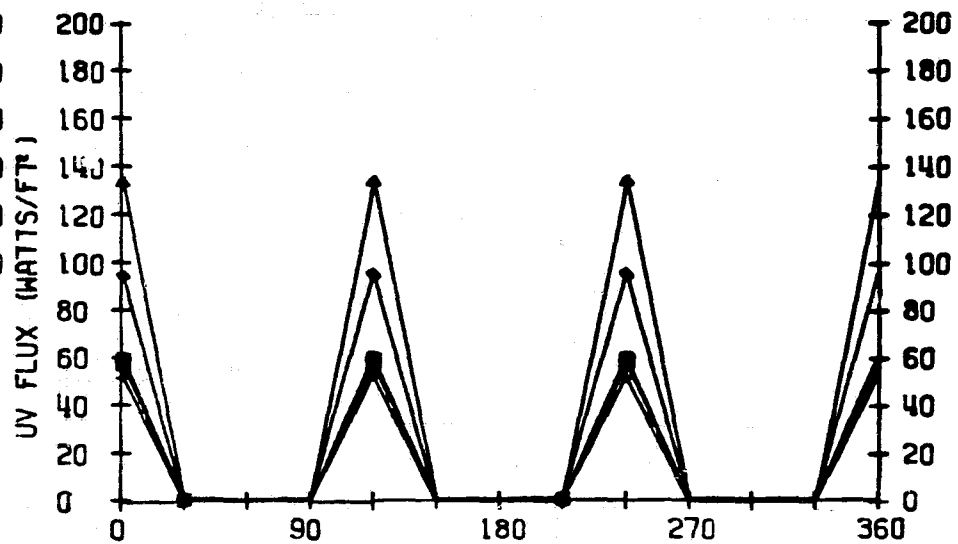
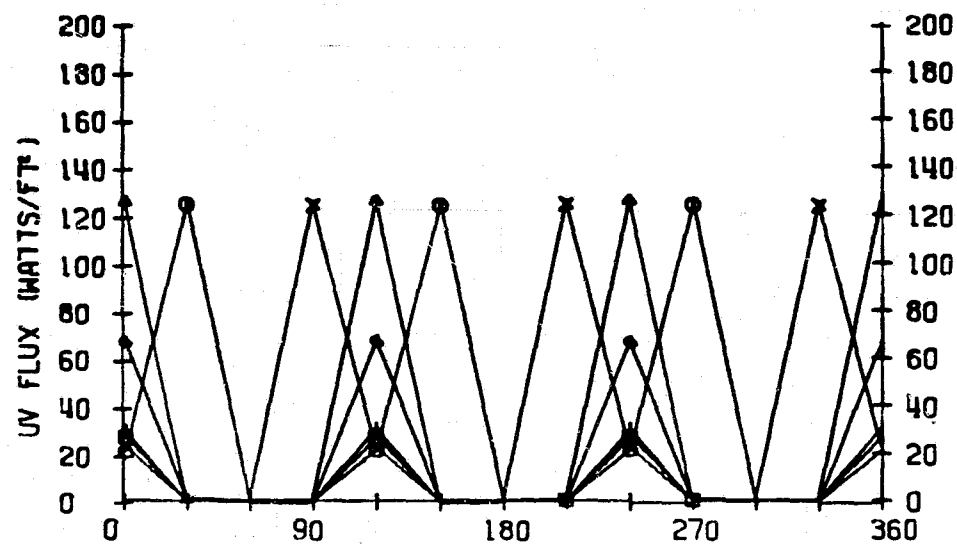
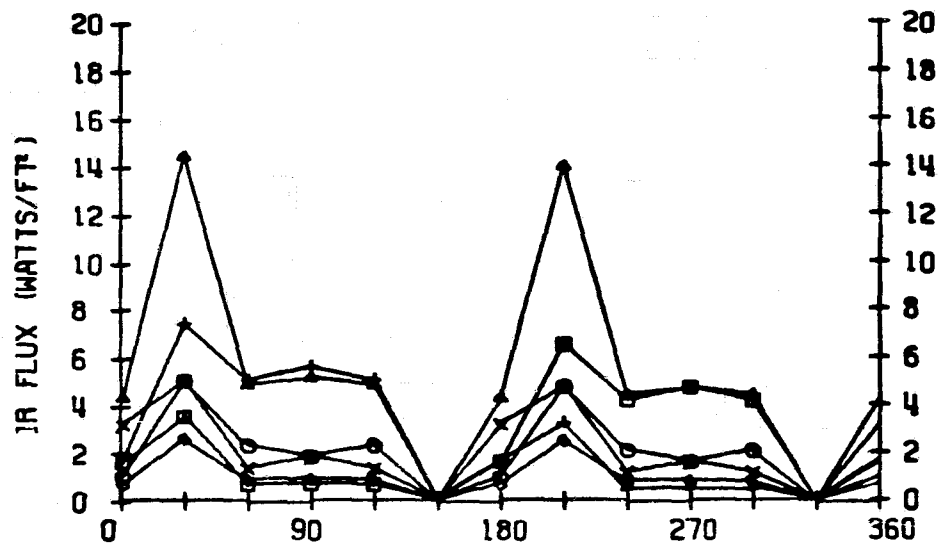


450 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 3



LOCATION 4

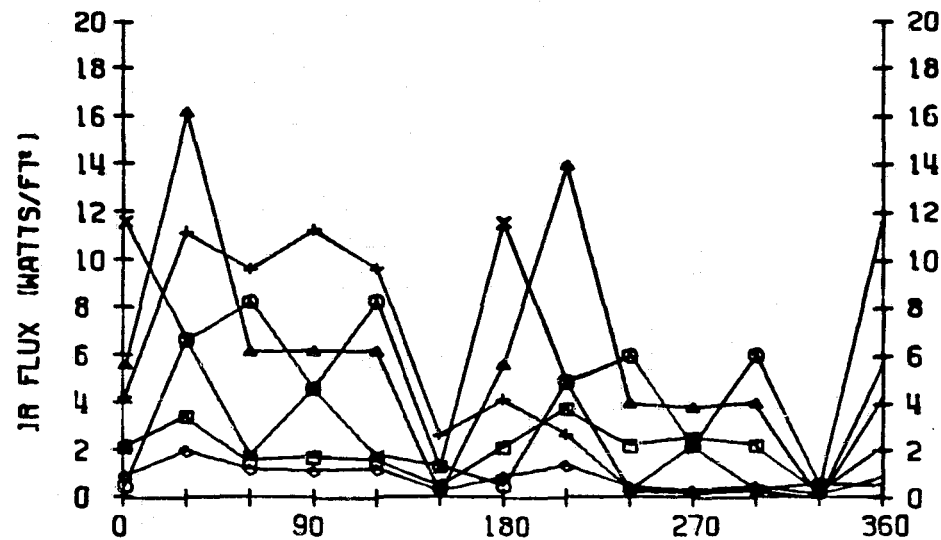


ORBIT POSITION (DEG)

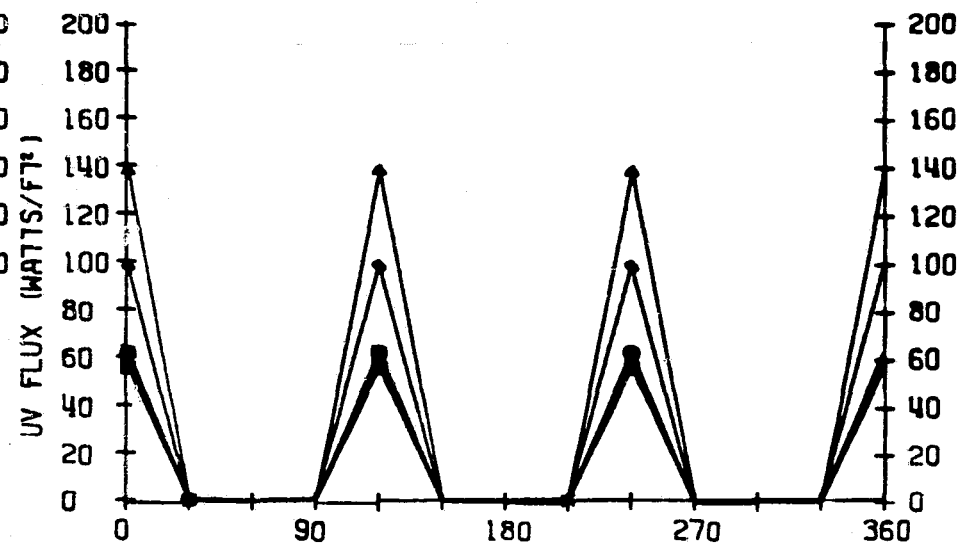
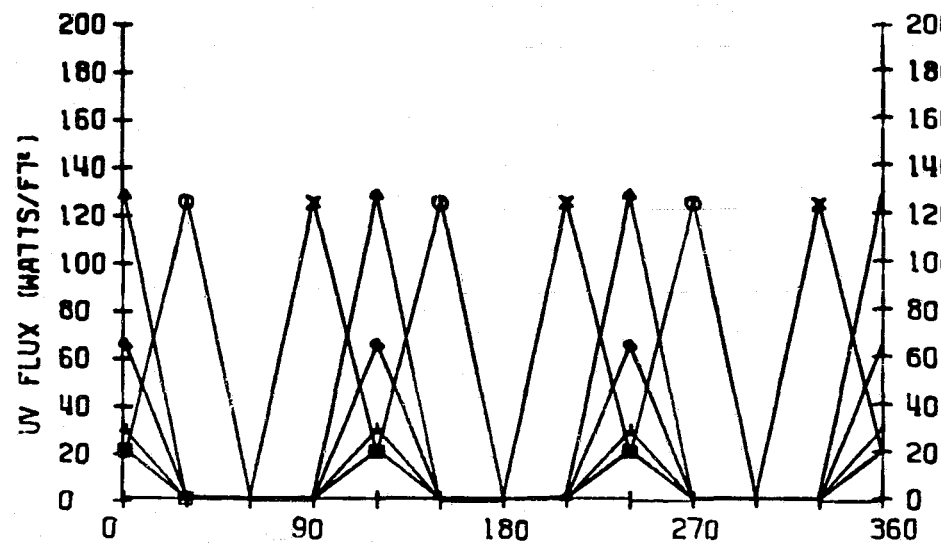
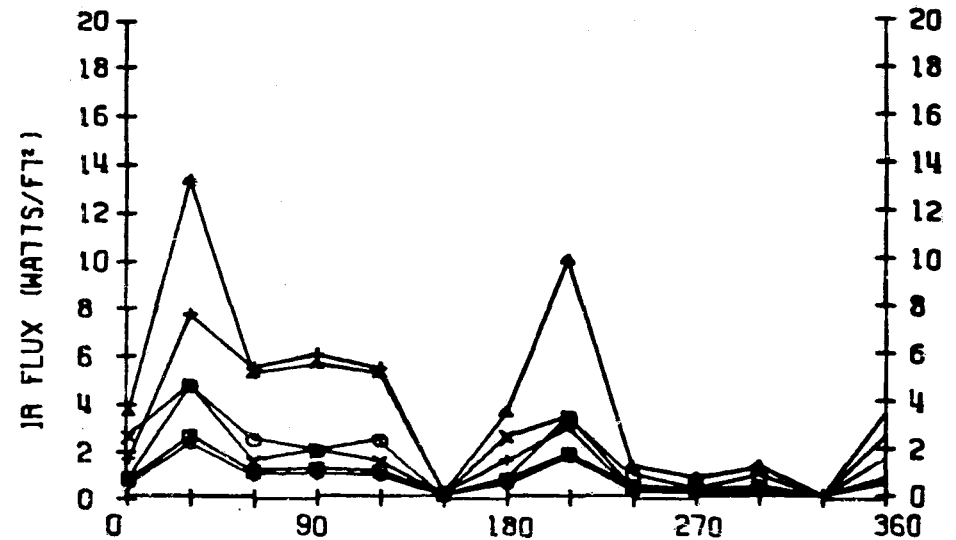
ORBIT POSITION (DEG)

450 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=90 DEG * PTC ORIENTATION * +Z SOLAR FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	11.4	9.9	8.0	14.7	12.6	18.3
R	+Y (○)	11.2	8.9	6.1	15.8	7.6	17.7
F	+Z (Δ)	0.2	0.2	0.1	2.9	1.5	6.1
L	-X (+)	11.4	10.0	8.7	14.2	7.9	15.1
U	-Y (X)	11.1	9.4	6.3	15.8	7.6	17.8
X	-Z (◇)	19.3	18.9	17.9	21.2	19.2	23.3

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 85

Passive thermal control (PTC), bottom towards sun at true anomaly = 0°

Beta angles - 0° , 45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

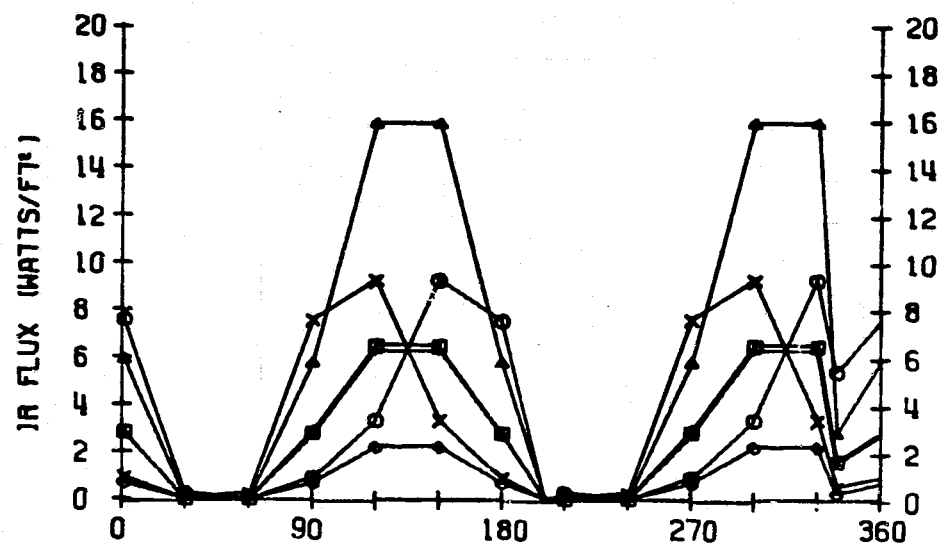
FOR

450 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

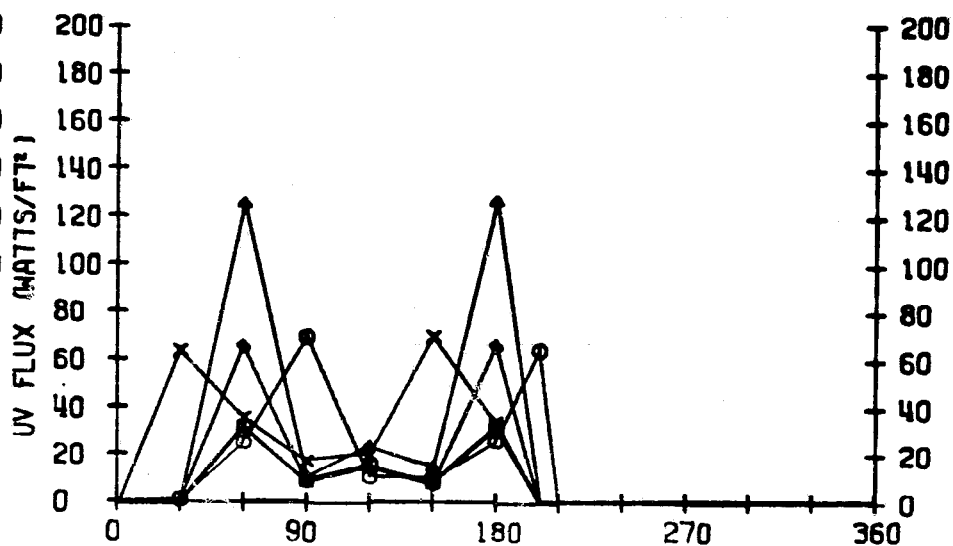
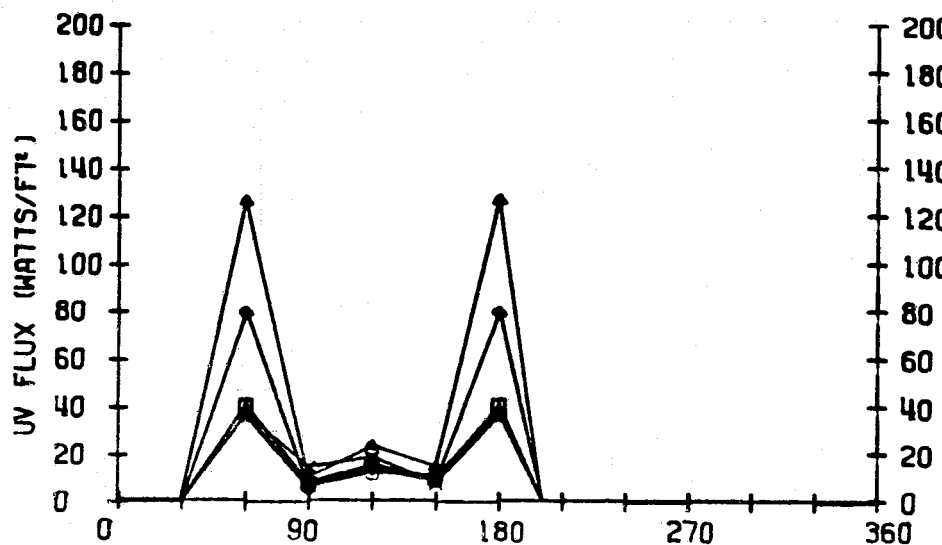
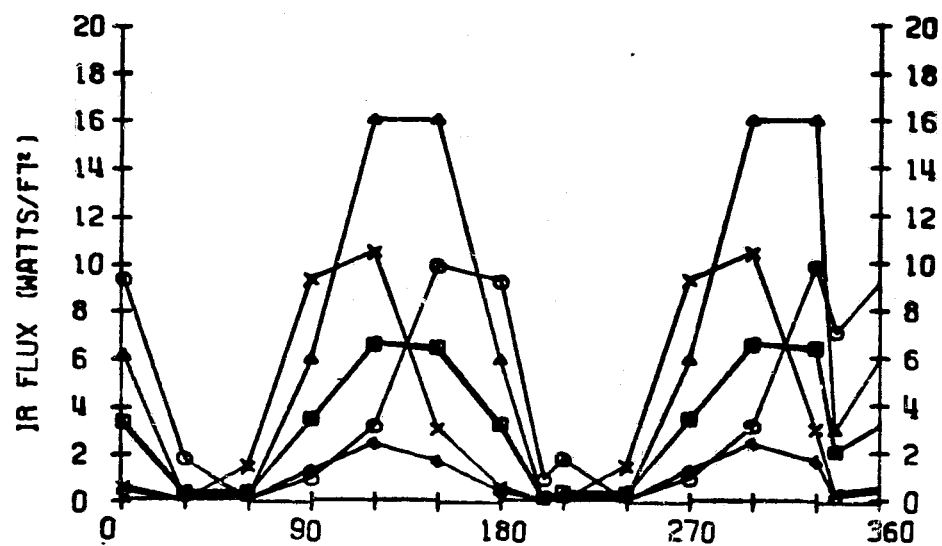
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.2	3.4	3.9	2.5	2.1	1.0
R	+Y (○)	3.4	4.0	5.0	2.2	4.6	1.8
F	+Z (Δ)	7.3	7.4	7.4	6.4	6.9	5.0
L	-X (+)	3.1	3.4	3.8	2.5	3.9	2.4
U	-Y (x)	3.7	4.3	5.5	2.3	5.1	1.8
X	-Z (◇)	1.0	1.0	1.1	1.1	1.0	0.9
U	+X (□)	9.4	8.0	7.3	12.0	5.7	11.0
V	+Y (○)	8.3	14.1	20.3	12.3	20.0	12.4
F	+Z (Δ)	24.4	24.4	24.4	25.3	24.5	25.5
L	-X (+)	8.7	8.0	7.8	11.1	7.7	11.9
U	-Y (x)	9.4	20.5	29.8	12.4	29.3	12.4
X	-Z (◇)	15.0	13.1	13.1	17.8	12.5	18.0

450 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 1



LOCATION 2

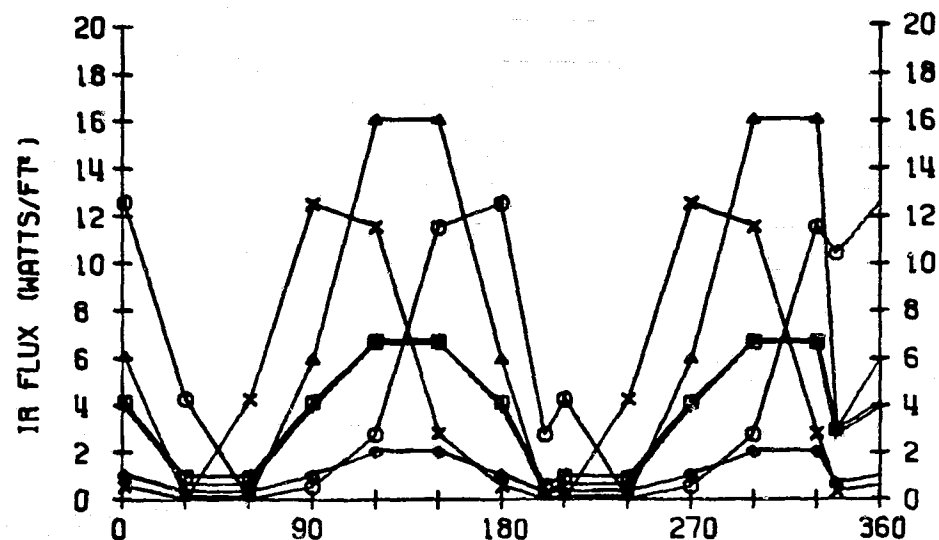


ORBIT POSITION (DEG)

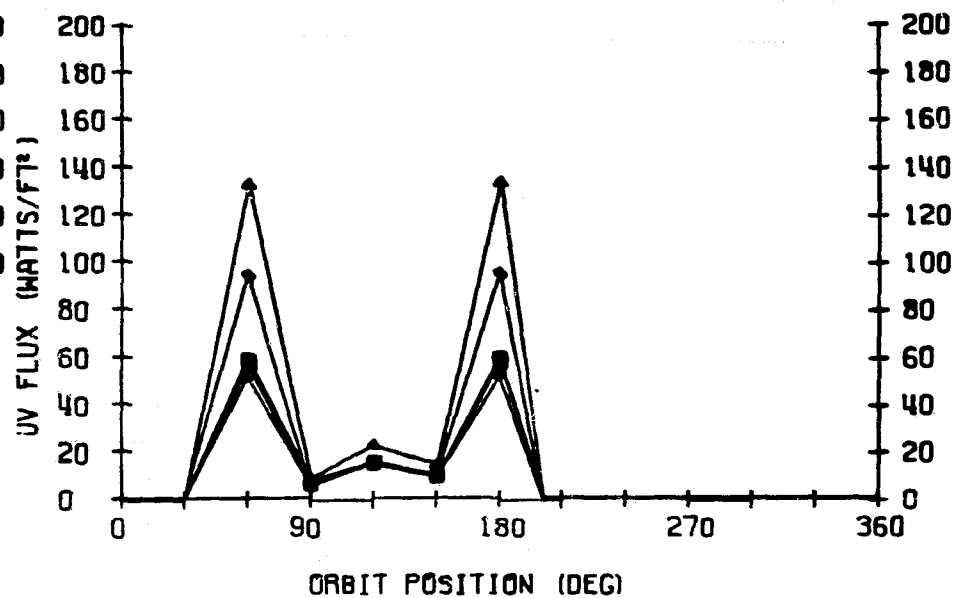
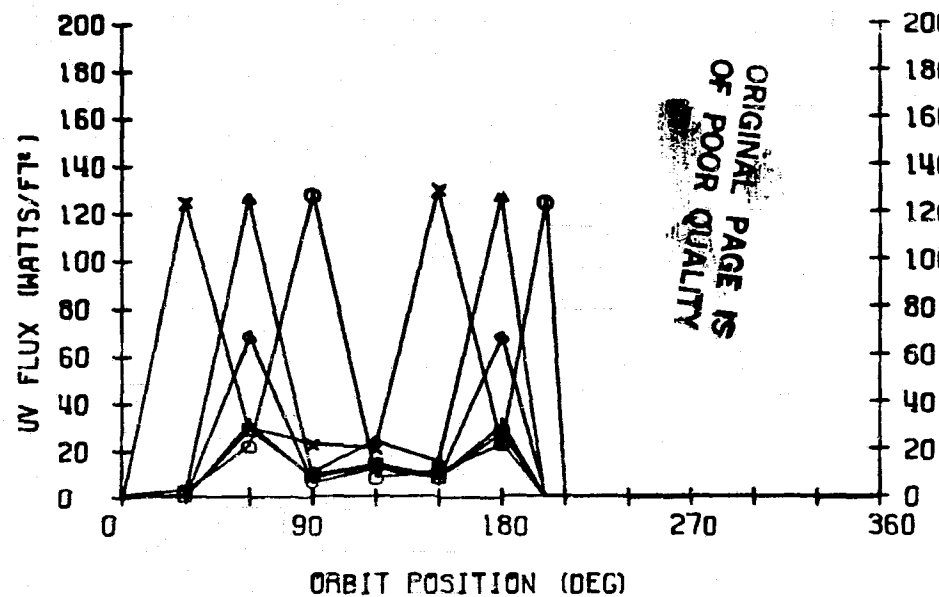
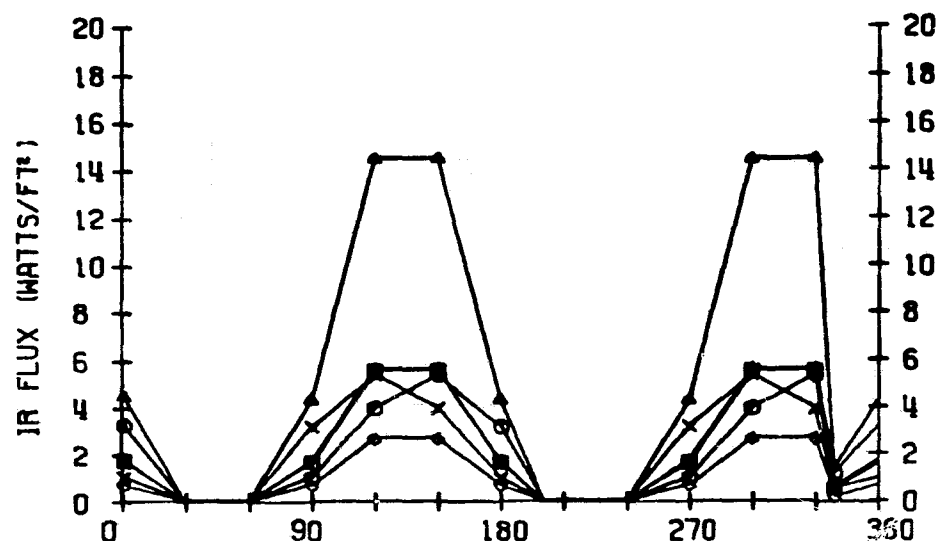
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 3

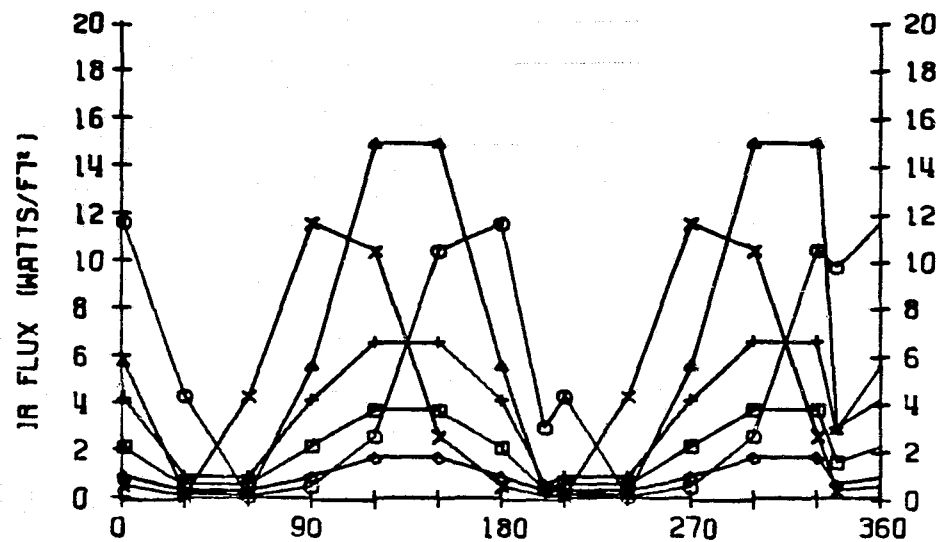


LOCATION 4

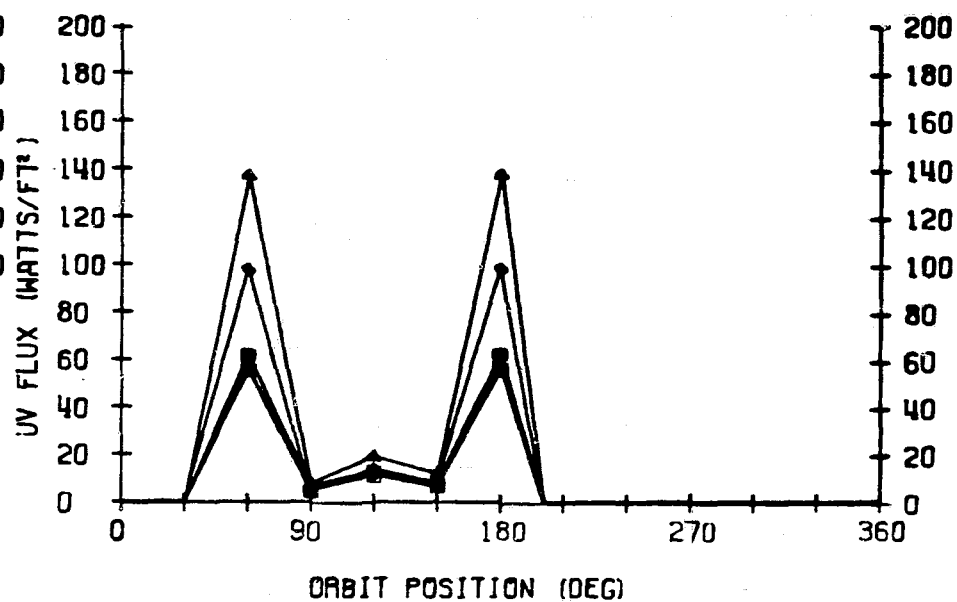
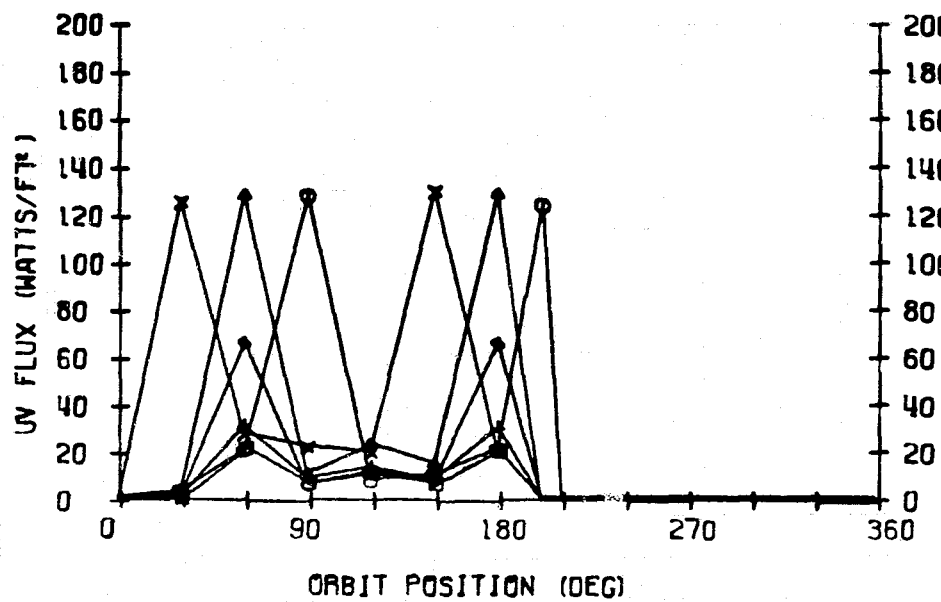
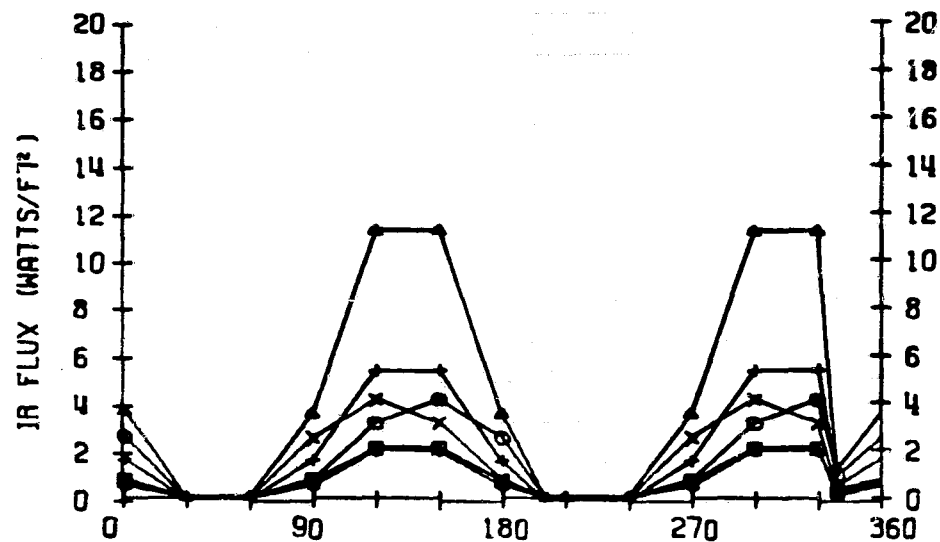


450 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 5

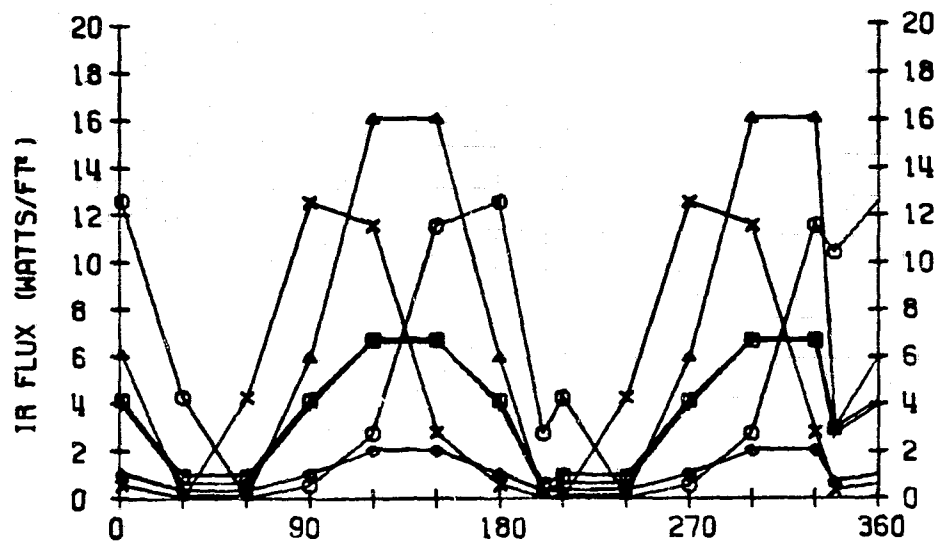


LOCATION 6

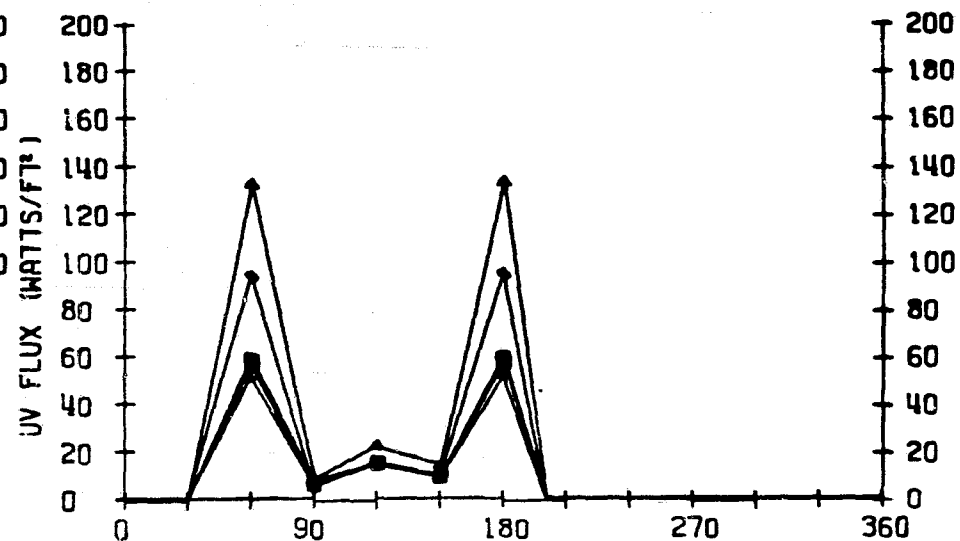
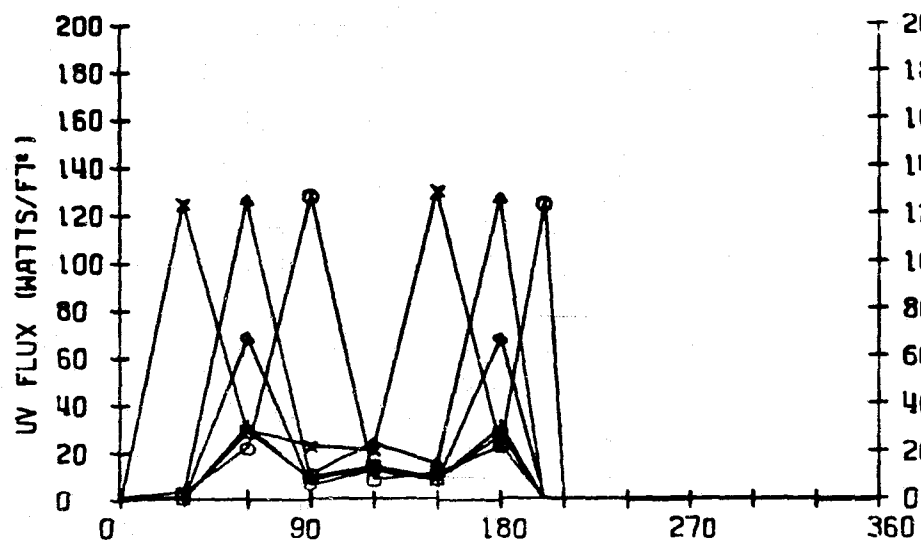
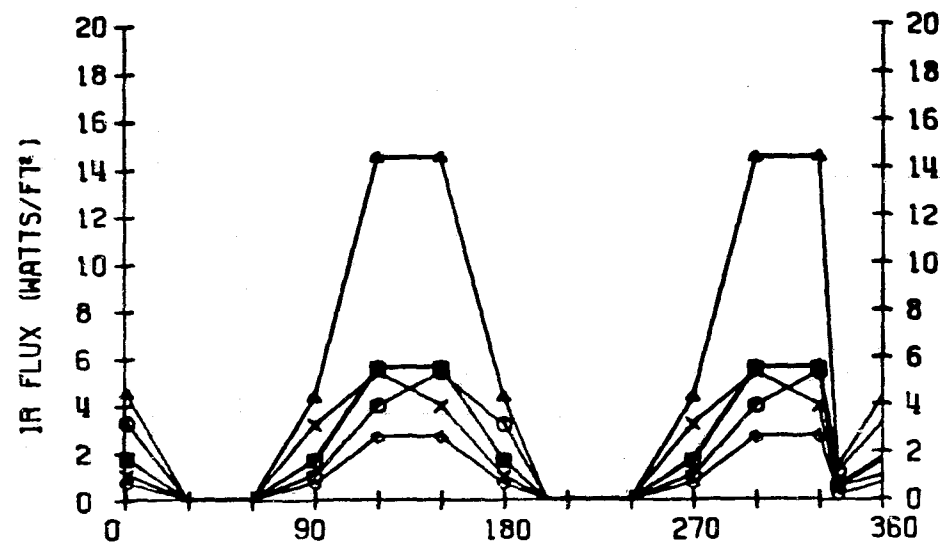


450 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 3



LOCATION 4

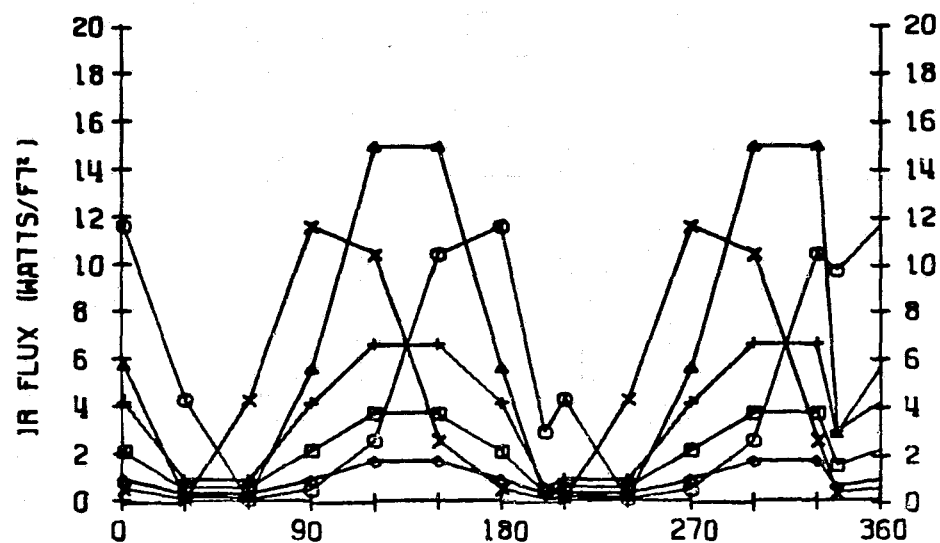


ORBIT POSITION (DEG)

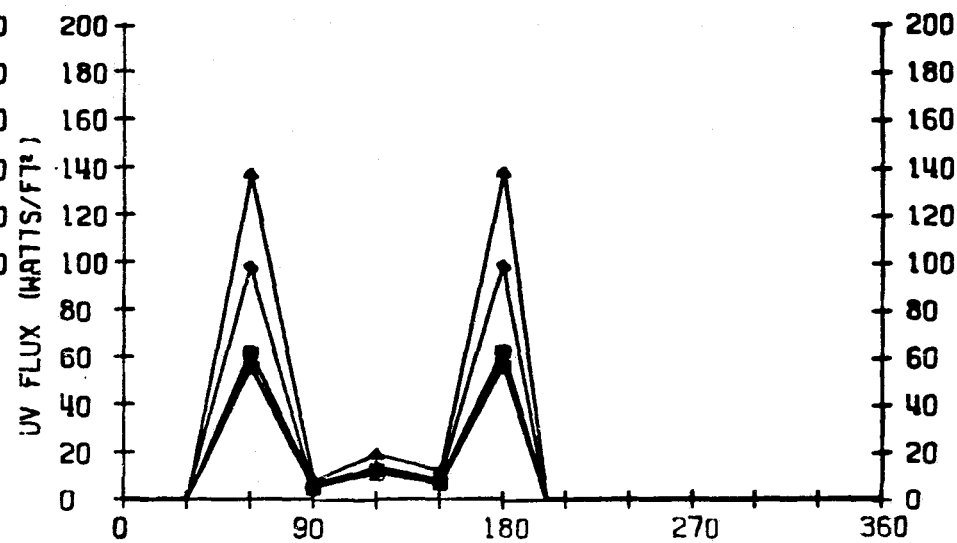
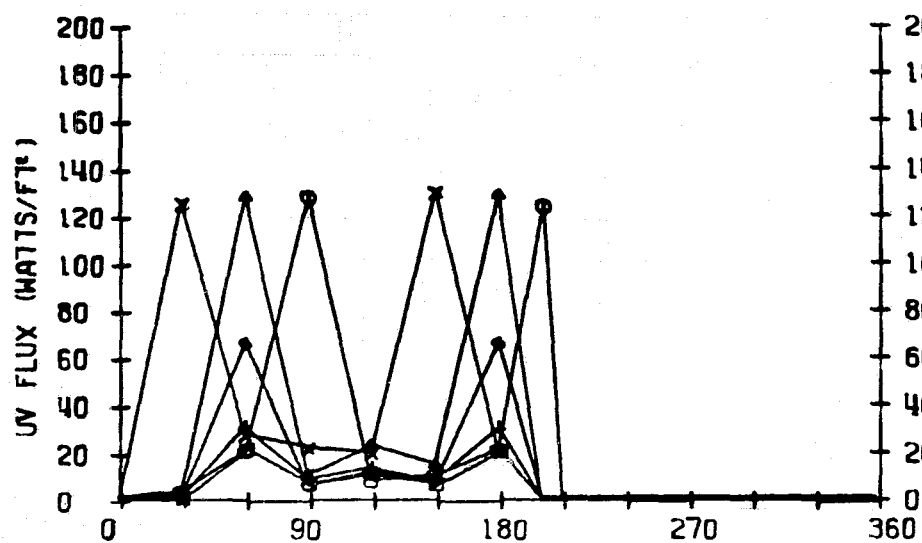
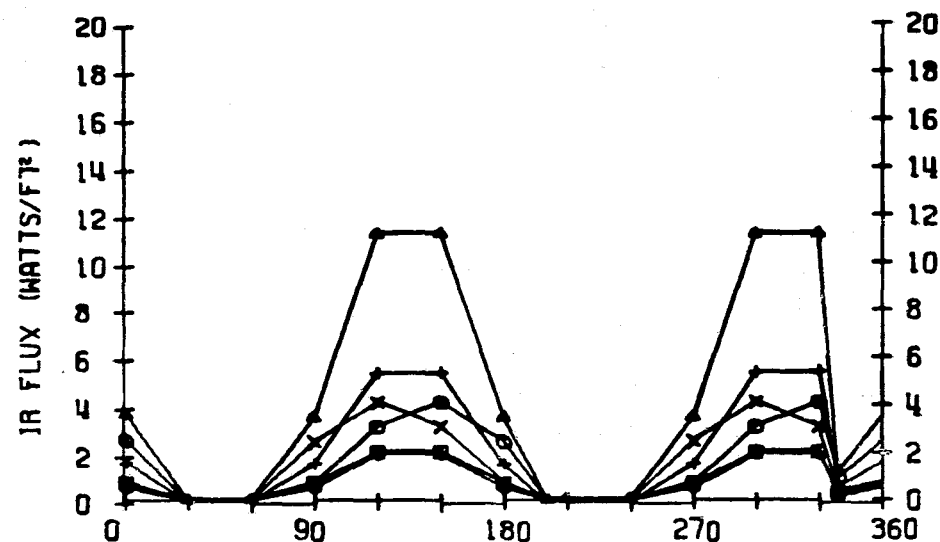
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	10.3	9.1	7.2	13.2	11.3	16.2
R	+Y (○)	10.4	8.4	5.7	14.5	6.9	15.8
F	+Z (△)	0.2	0.2	0.1	2.7	1.3	5.5
L	-X (+)	10.2	9.1	7.9	12.8	7.1	13.4
U	-Y (x)	9.9	8.4	5.7	14.0	6.8	15.6
X	-Z (◇)	17.3	17.4	16.2	18.9	17.1	20.4

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

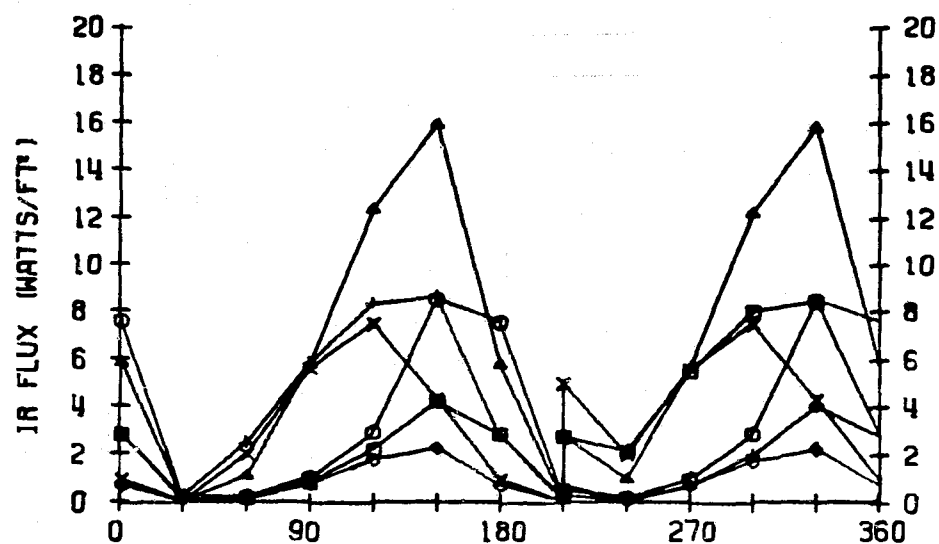
FOR

450 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

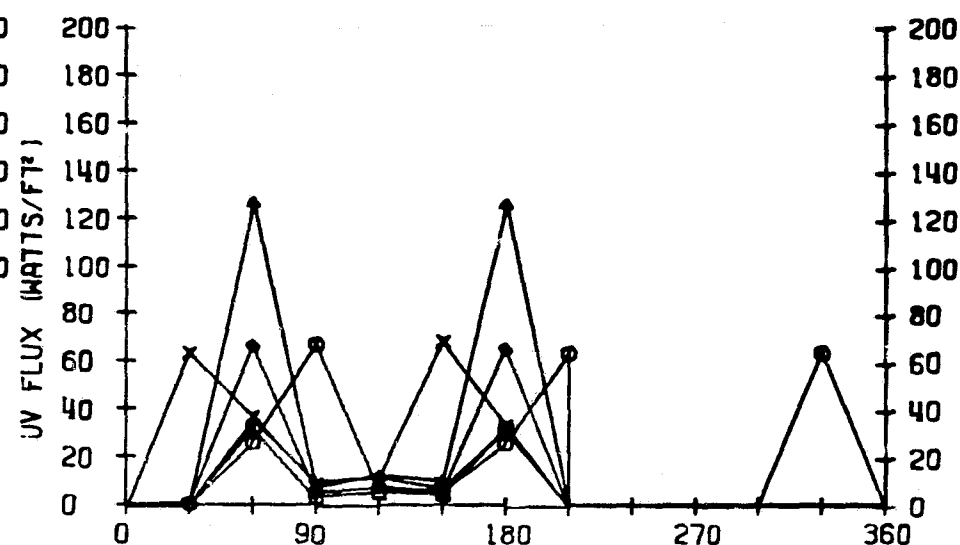
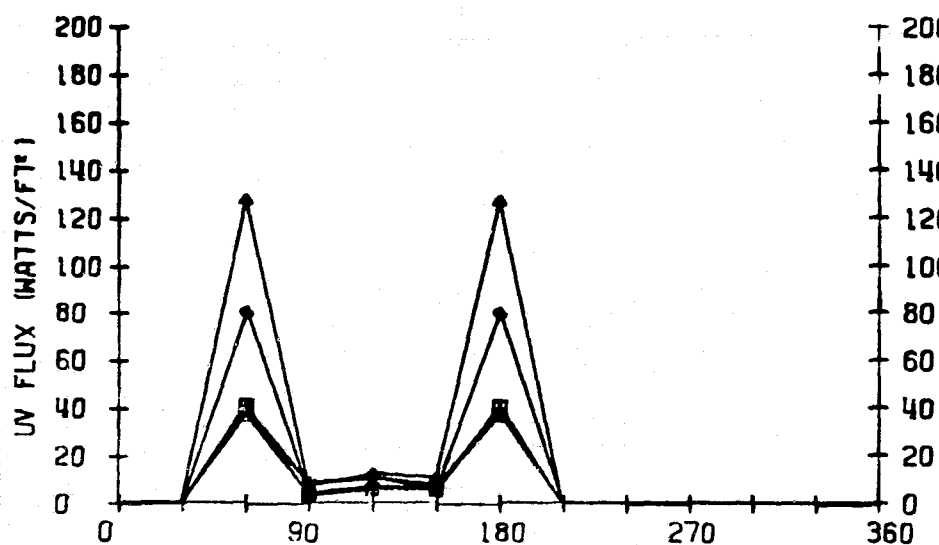
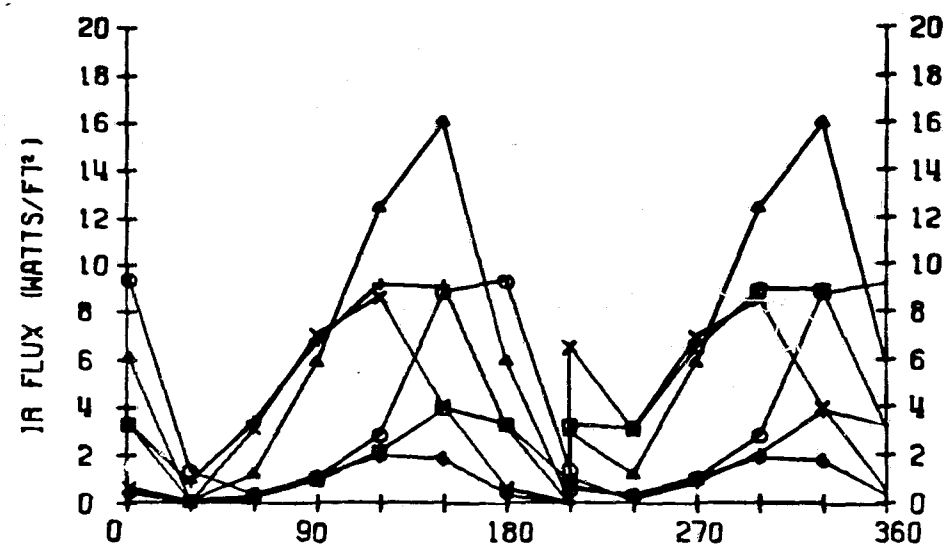
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.1	3.5	4.0	2.3	2.0	0.9
R	+Y (○)	3.2	3.7	4.5	2.1	4.1	1.6
F	+Z (Δ)	6.8	7.0	7.0	5.8	6.4	4.7
L	-X (+)	3.2	3.6	4.1	2.5	4.2	2.5
U	-Y (X)	3.5	4.0	5.1	2.2	4.8	1.8
X	-Z (◇)	0.9	0.9	1.0	1.0	0.9	0.8
U	+X (□)	8.4	6.8	5.8	11.4	5.7	11.6
V	+Y (○)	8.0	17.2	26.8	12.1	26.9	12.8
F	+Z (Δ)	24.6	24.6	24.6	25.7	25.1	26.8
L	-X (+)	9.3	8.6	8.7	11.5	8.7	12.8
U	-Y (X)	8.7	19.5	28.4	12.2	28.4	12.9
X	-Z (◇)	15.3	13.1	13.2	18.2	13.1	18.9

450 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 1



LOCATION 2

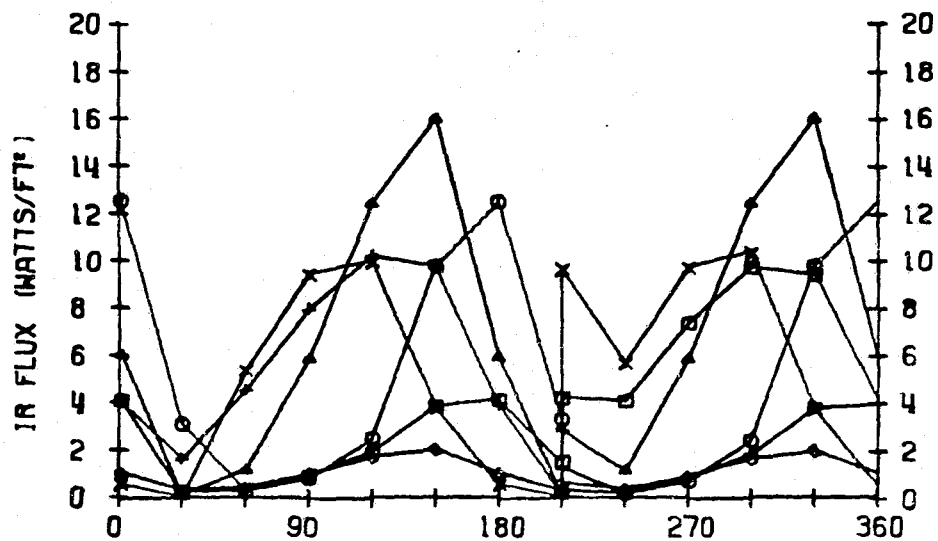


ORBIT POSITION (DEG)

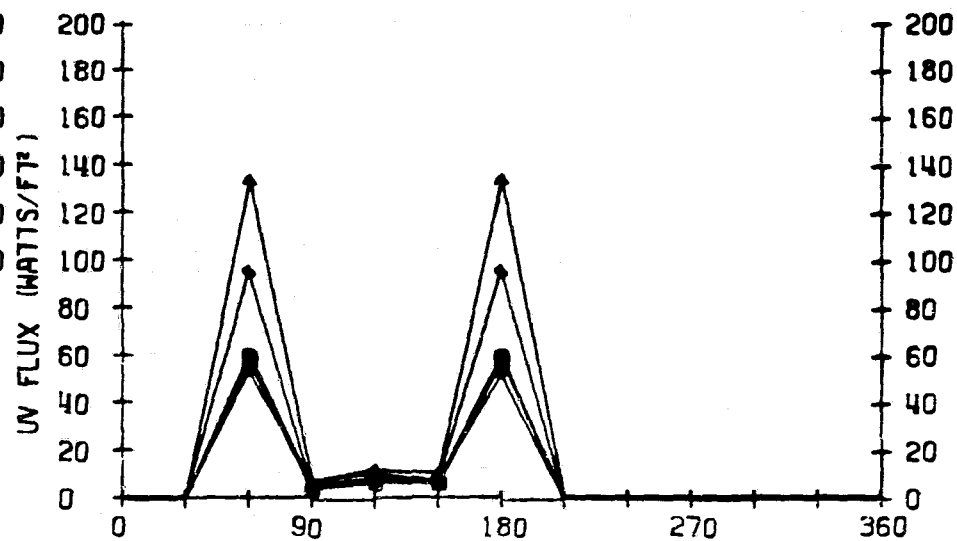
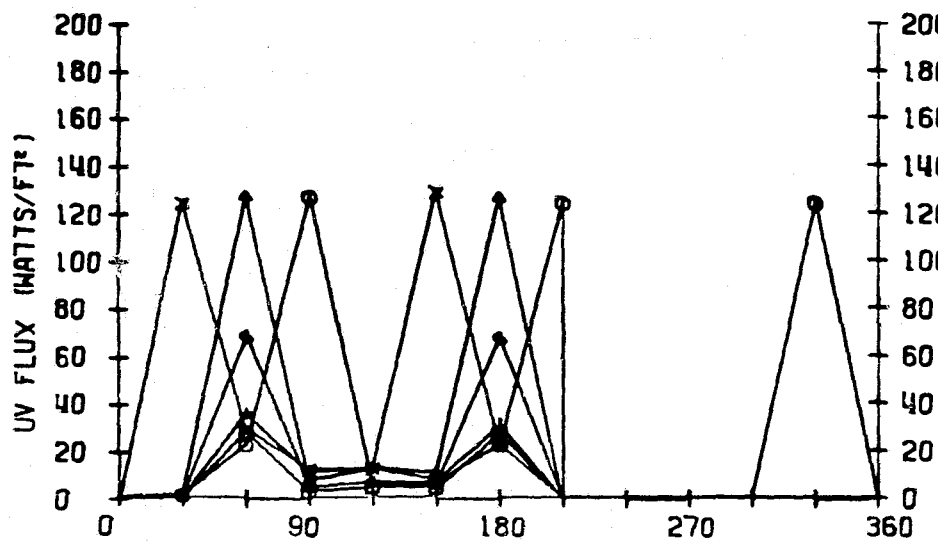
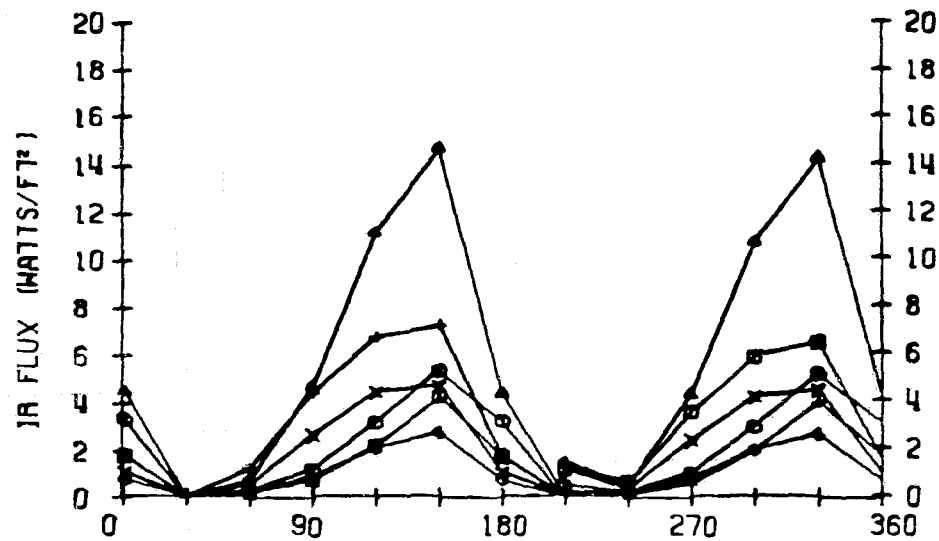
ORBIT POSITION (DEG)

450 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 3



LOCATION 4

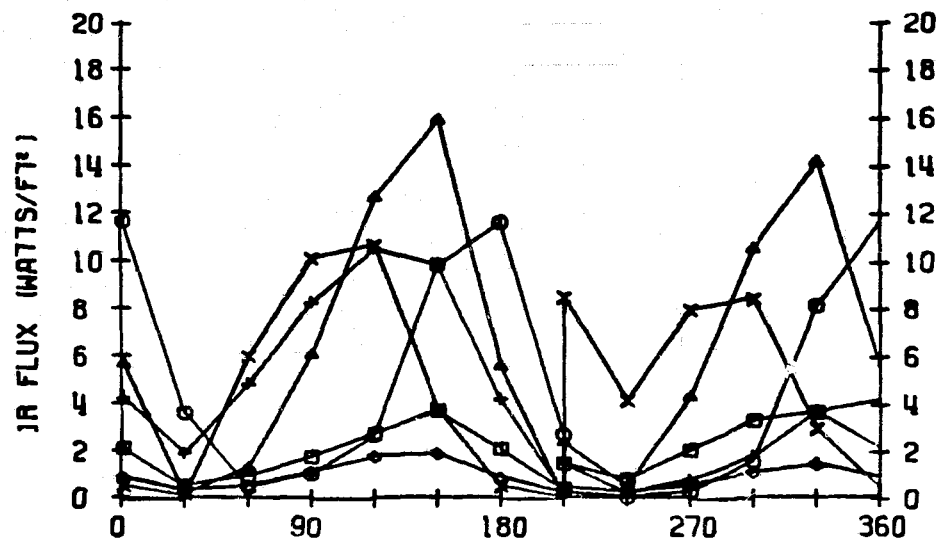


ORBIT POSITION (DEG)

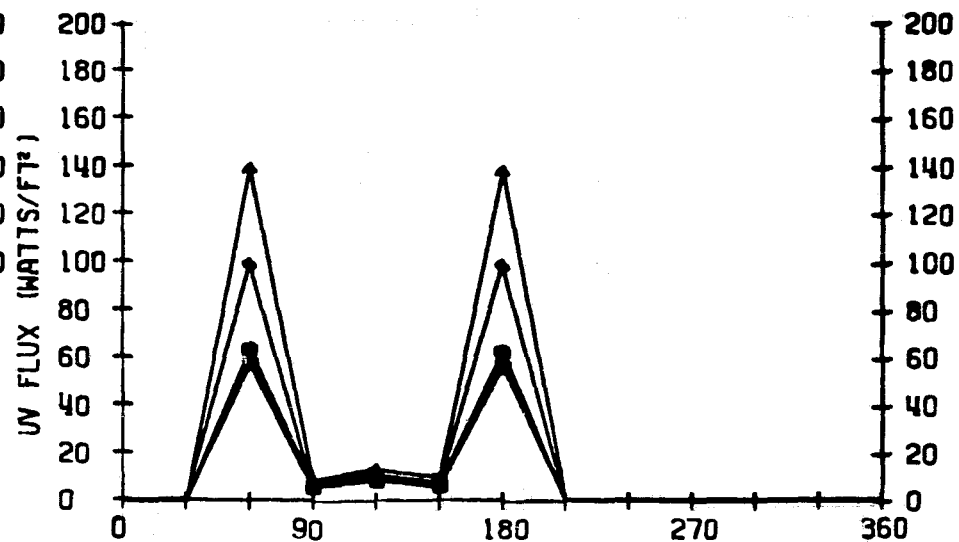
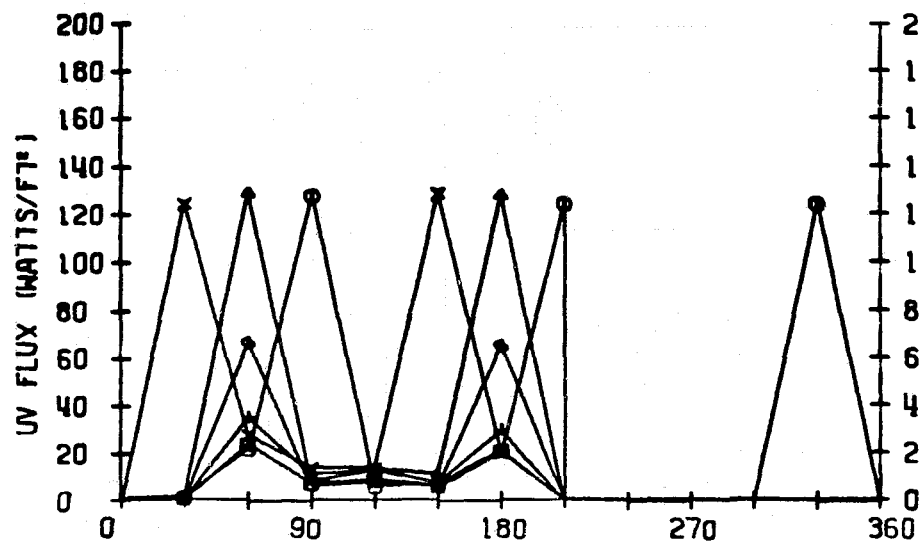
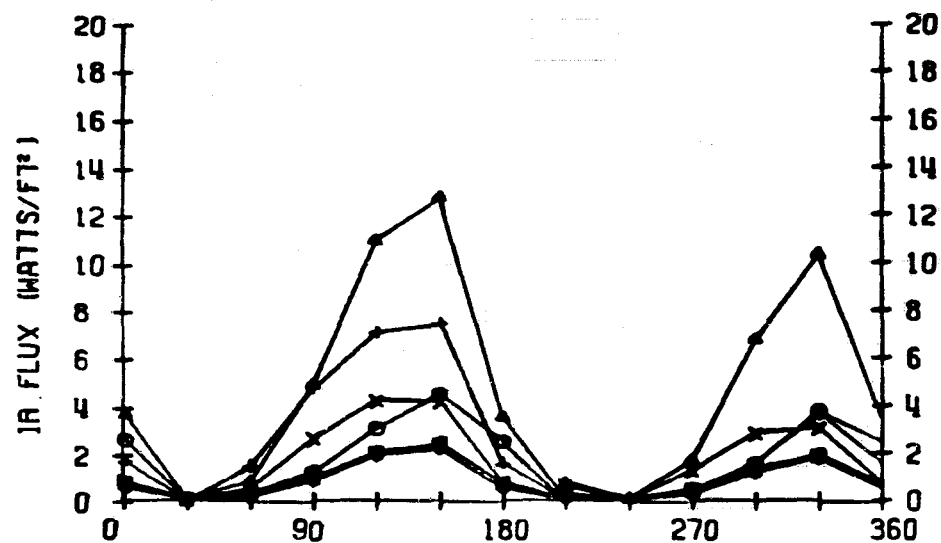
ORBIT POSITION (DEG)

450 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=45 DEG * PTC ORIENTATION * -Z SOLAR FACING AT 0 DEG

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	10.4	9.2	7.4	13.4	12.0	17.1
R	+Y (○)	10.4	8.4	5.7	14.5	7.2	16.5
F	+Z (△)	0.2	0.2	0.1	2.7	1.4	5.8
L	-X (†)	10.2	9.1	7.9	12.8	7.2	13.8
U	-Y (X)	10.0	8.4	5.7	14.1	7.1	16.3
X	-Z (◇)	17.4	17.5	16.3	19.0	17.8	21.2

FLUX DATA

FOR

ALTITUDE - 450 km

ORIENTATION NO. 8c

Passive thermal control (PTC), bay towards earth at true anomaly = 0°

Beta angles - 0° , 45°

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

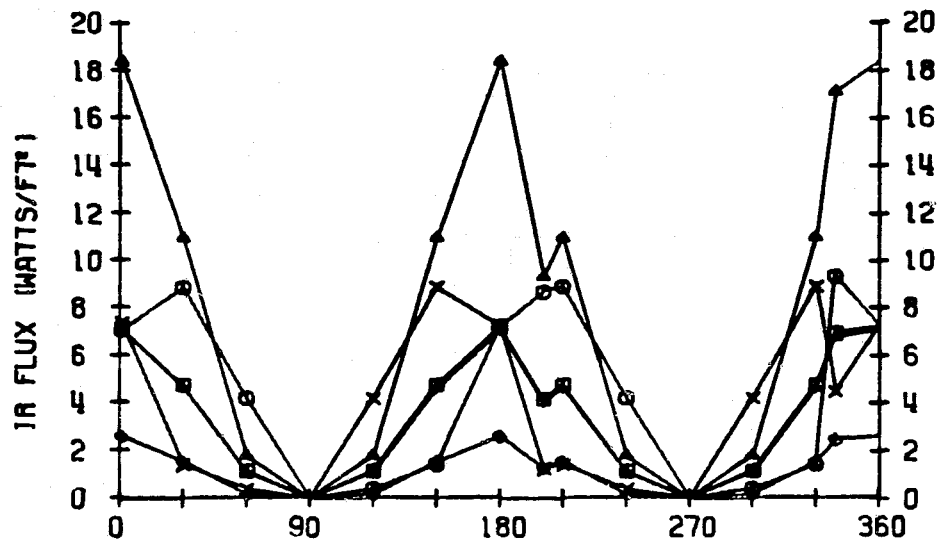
FOR

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

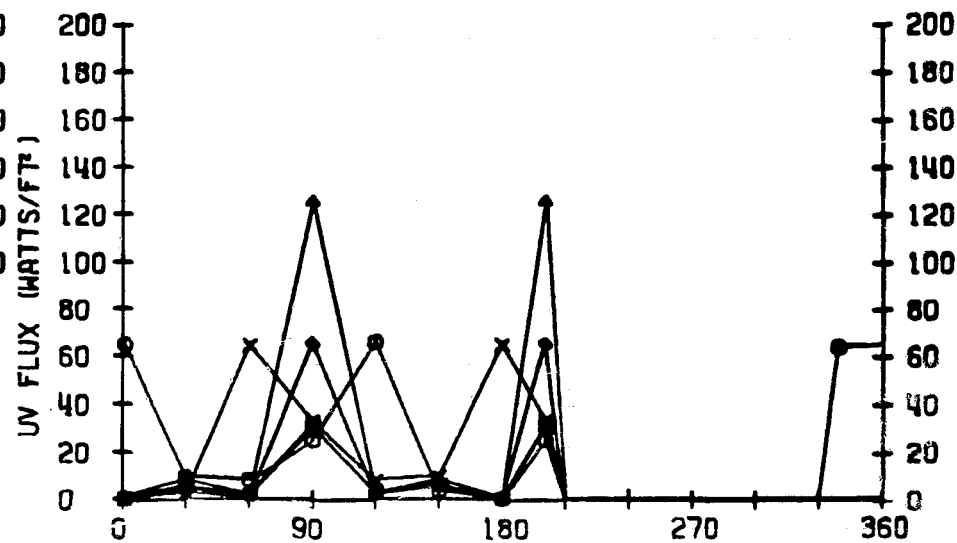
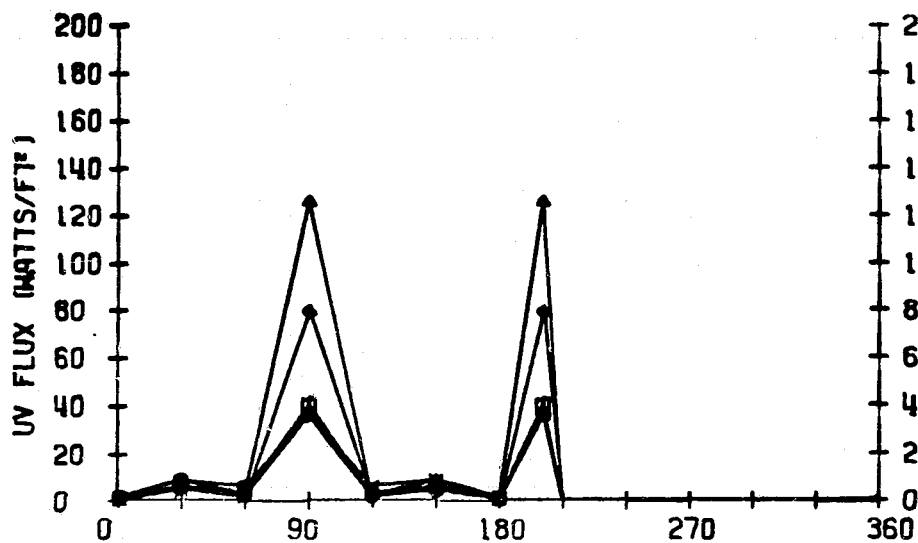
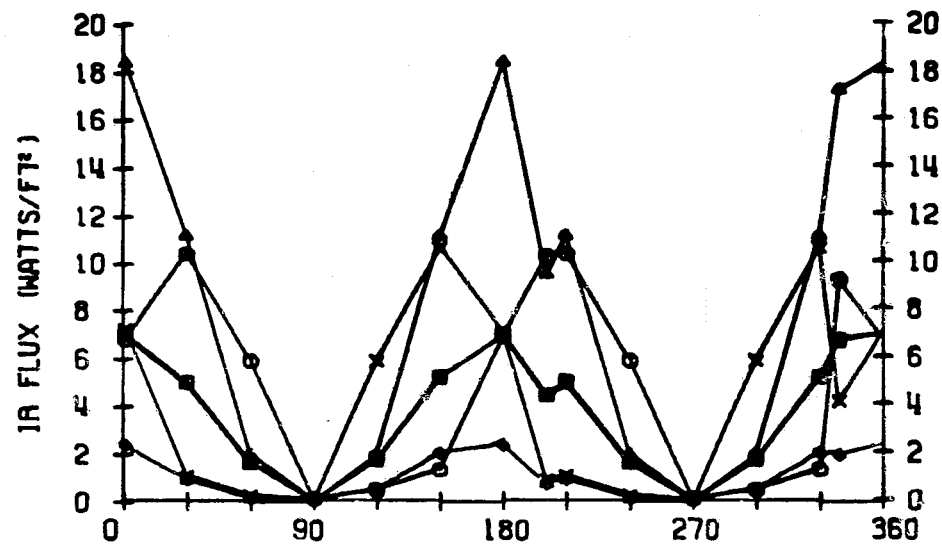
	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	3.0	3.3	3.8	2.2	2.0	0.9
R	+Y (○)	3.5	4.0	5.1	2.0	4.7	1.6
F	+Z (△)	6.8	6.9	6.9	5.6	6.5	4.4
L	-X (+)	2.9	3.2	3.6	2.3	3.8	2.2
U	-Y (X)	3.5	4.0	5.1	2.0	4.7	1.6
X	-Z (◇)	0.9	0.9	1.1	1.0	0.9	0.8
U	+X (□)	6.2	5.4	5.1	7.9	4.0	7.5
V	+Y (○)	6.1	14.6	23.5	8.2	23.2	8.4
F	+Z (△)	16.7	16.7	16.7	17.1	16.9	17.6
L	-X (+)	5.8	5.3	5.4	7.3	5.3	7.9
U	-Y (X)	6.2	16.3	25.3	8.2	24.9	8.4
X	-Z (◇)	10.3	8.9	9.0	12.1	8.7	12.4

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 1



LOCATION 2

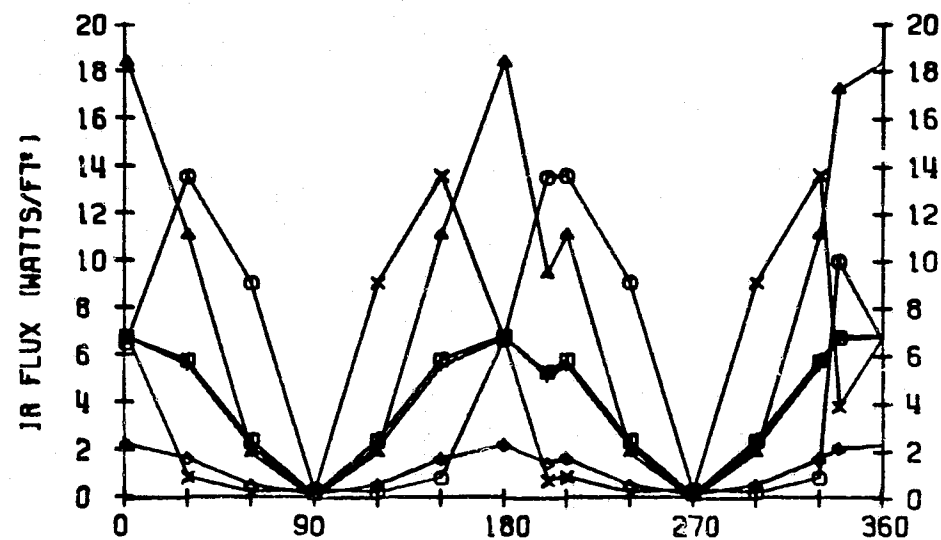


ORBIT POSITION (DEG)

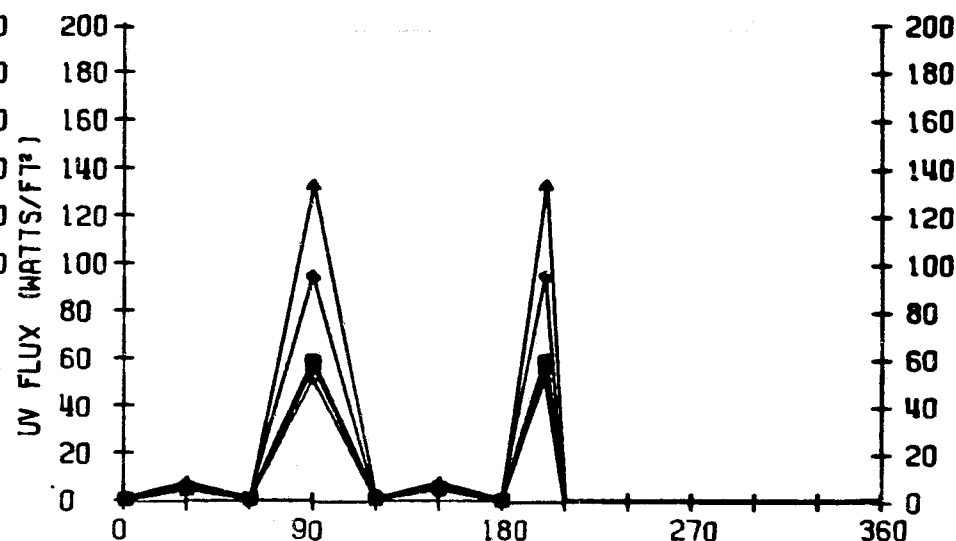
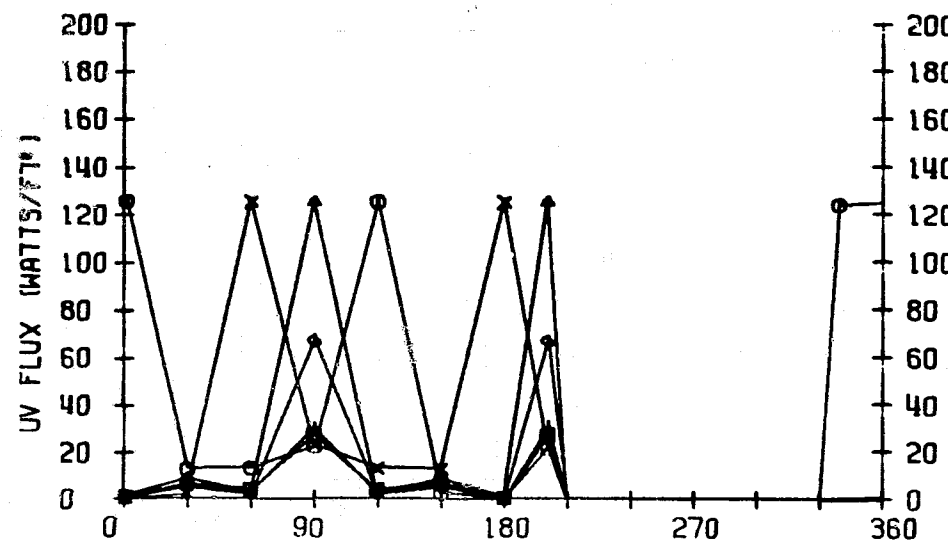
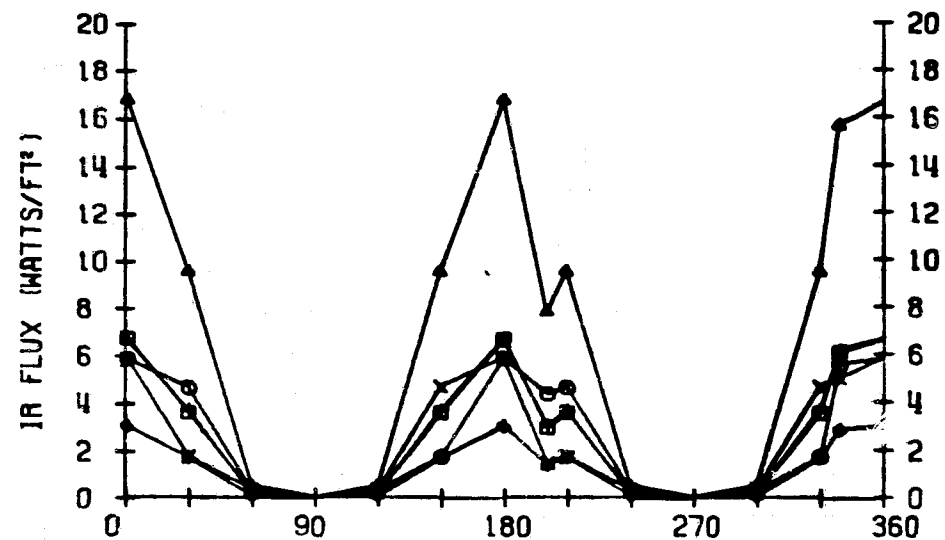
ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 3



LOCATION 4



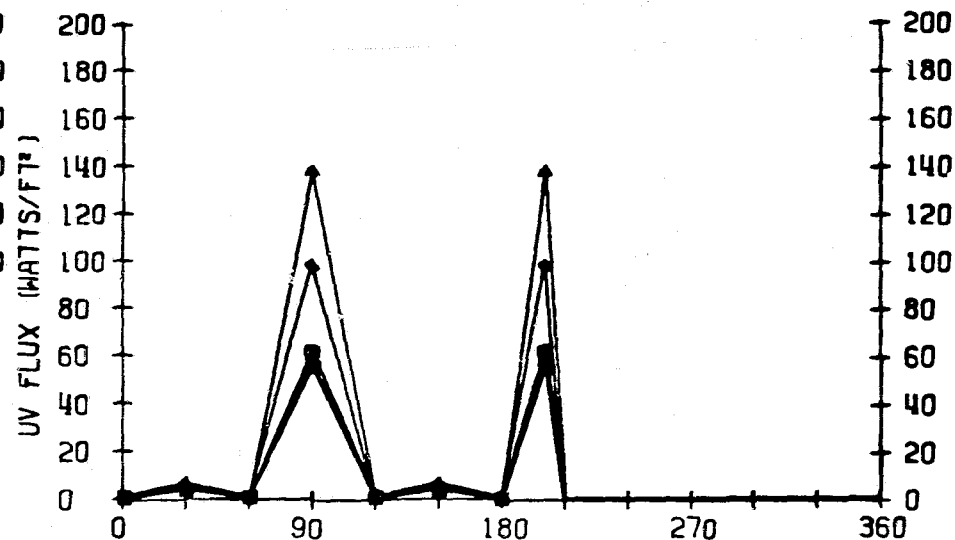
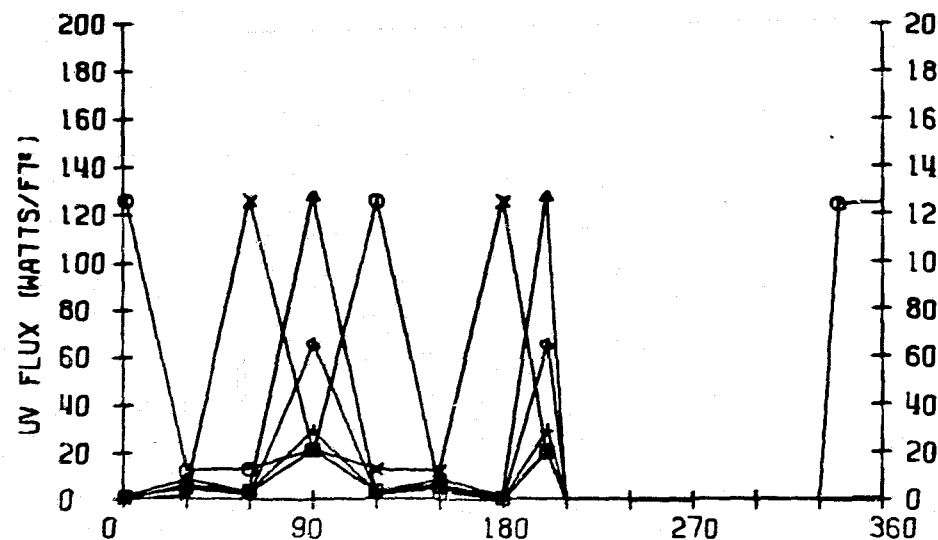
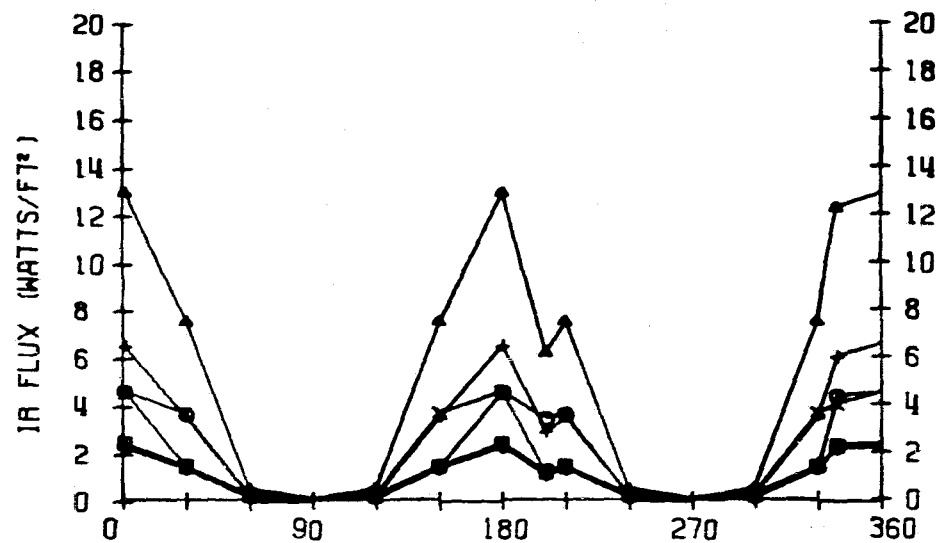
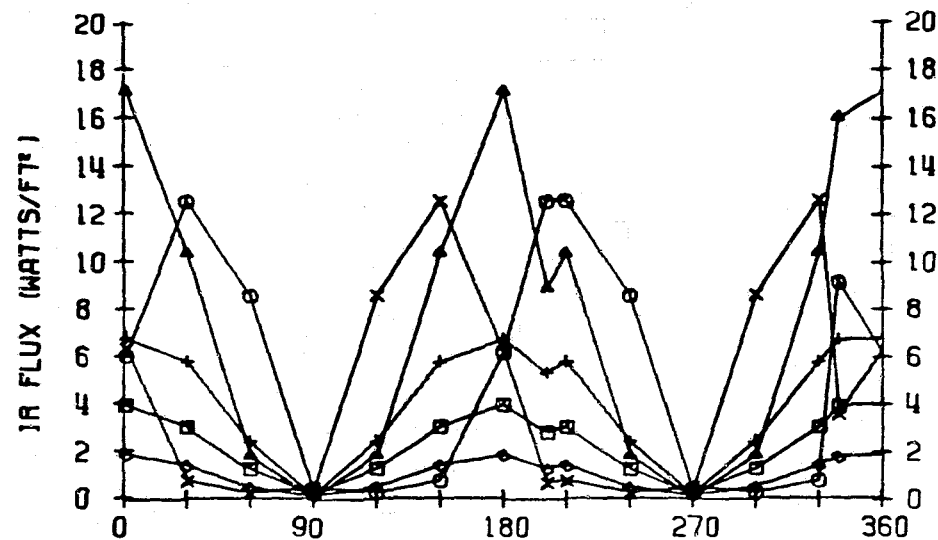
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 5

LOCATION 6



ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=0 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	8.7	7.6	6.1	11.1	9.7	13.7
R	+Y (○)	8.6	7.0	4.7	12.0	5.8	13.2
F	+Z (△)	0.2	0.1	0.1	2.3	1.2	4.7
L	-X (+)	8.6	7.7	6.7	10.7	6.0	11.2
U	-Y (x)	8.7	7.2	5.0	12.0	5.9	13.3
X	-Z (◇)	14.4	14.5	13.6	15.6	14.4	16.9

ORBITAL AVERAGE FLUX INTENSITIES (WATTS/FT²)

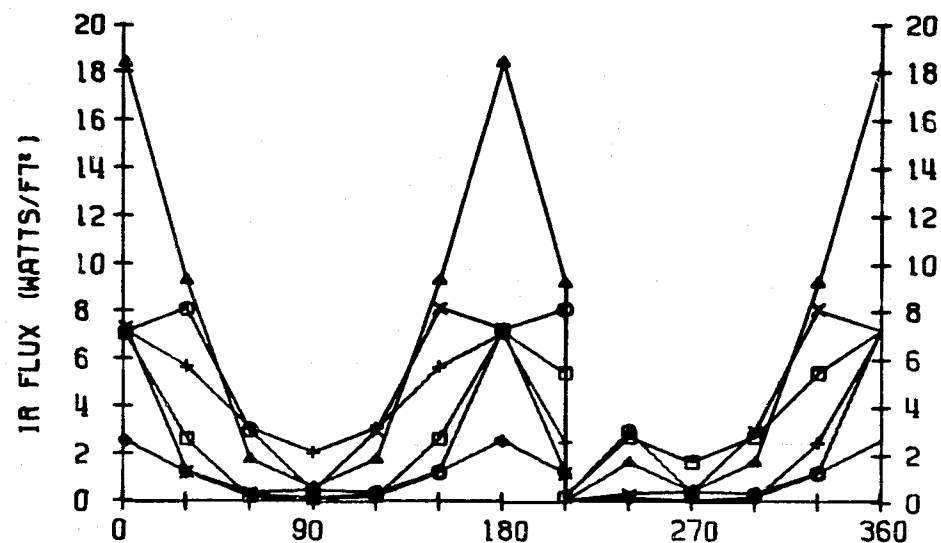
FOR

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

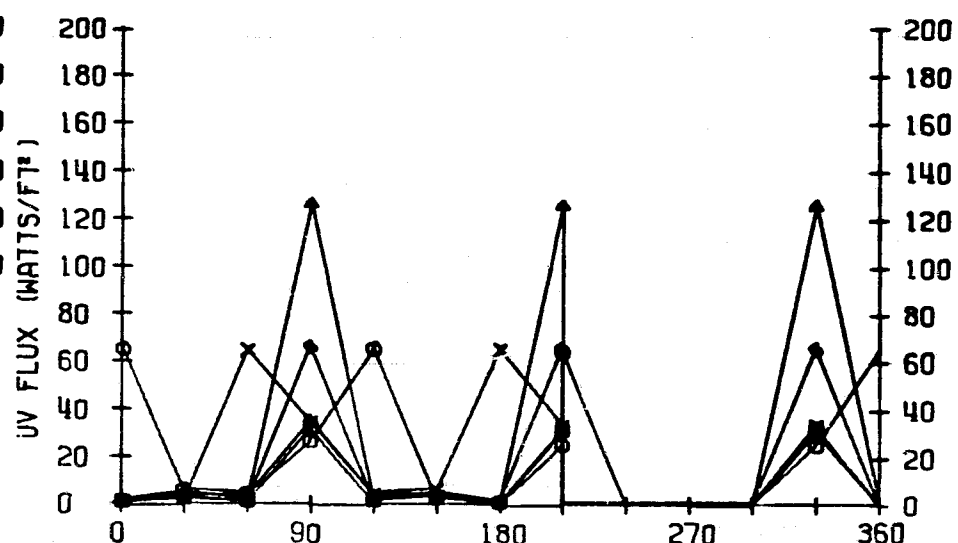
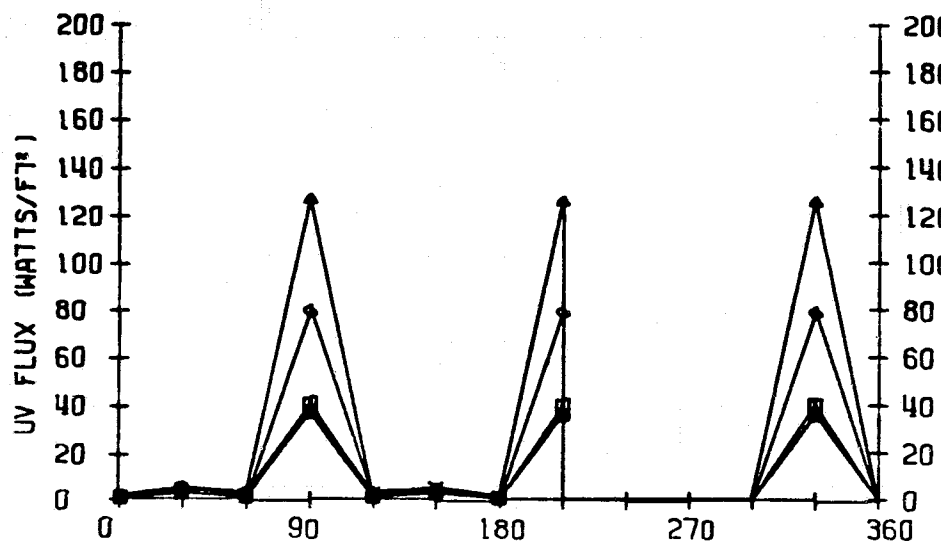
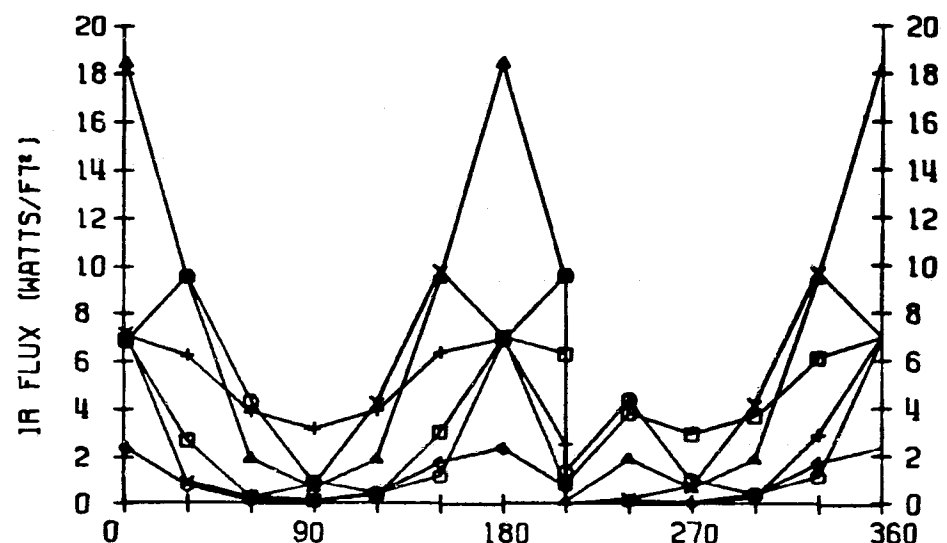
		LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
	SURFACE DIRECTION						
I	+X (□)	3.0	3.4	3.9	2.2	1.9	0.9
R	+Y (○)	3.2	3.8	4.7	1.9	4.4	1.5
F	+Z (Δ)	6.3	6.4	6.4	5.2	5.9	4.1
L	-X (+)	3.1	3.5	4.1	2.4	4.2	2.4
U	-Y (x)	3.2	3.7	4.8	1.9	4.4	1.5
X	-Z (◇)	0.8	0.8	1.0	0.9	0.9	0.7
U	+X (□)	7.8	6.2	5.5	10.7	5.2	10.7
V	+Y (○)	7.5	14.2	21.7	11.2	21.8	11.8
F	+Z (Δ)	23.2	23.2	23.2	24.2	23.6	25.3
L	-X (+)	8.2	7.5	7.8	10.3	7.8	11.5
U	-Y (x)	7.6	18.4	27.3	11.2	27.2	11.8
X	-Z (◇)	14.5	12.2	12.5	17.2	12.3	17.9

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 1



LOCATION 2



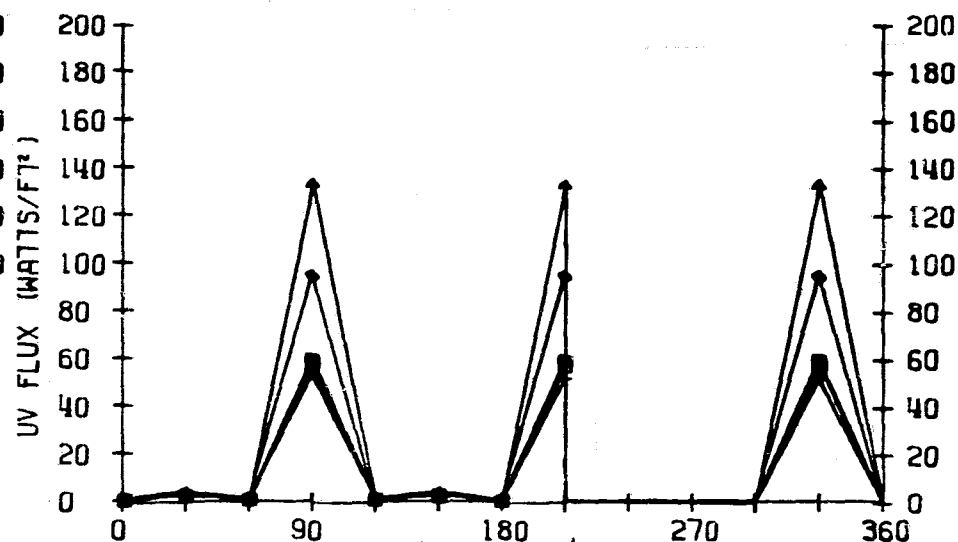
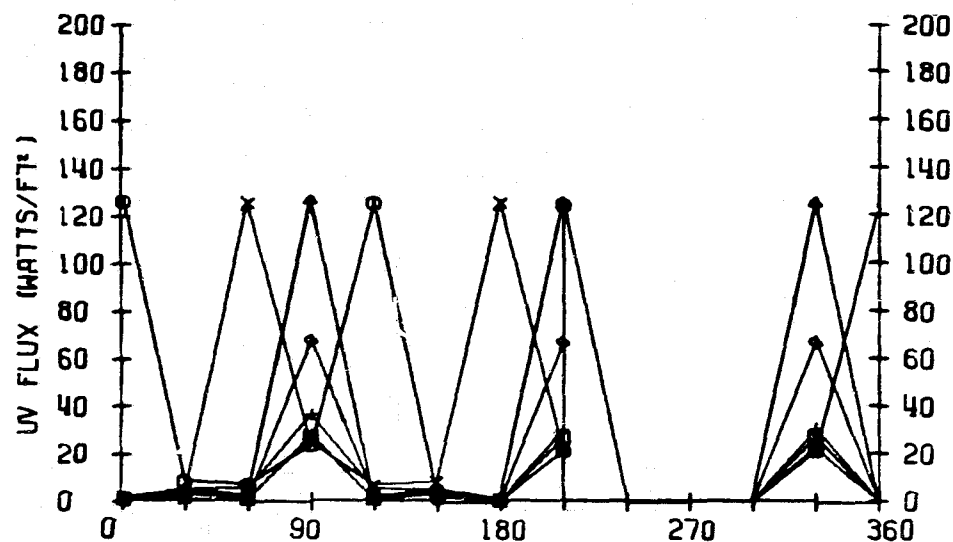
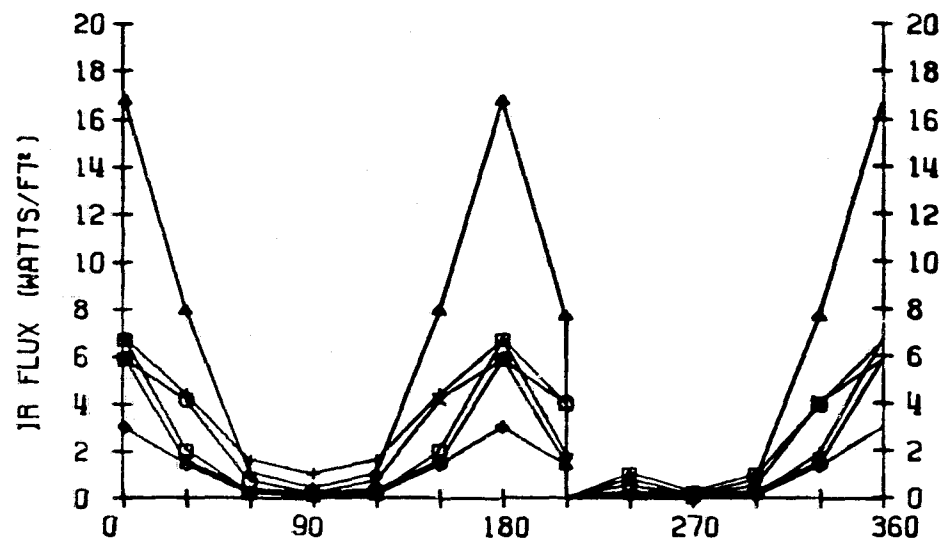
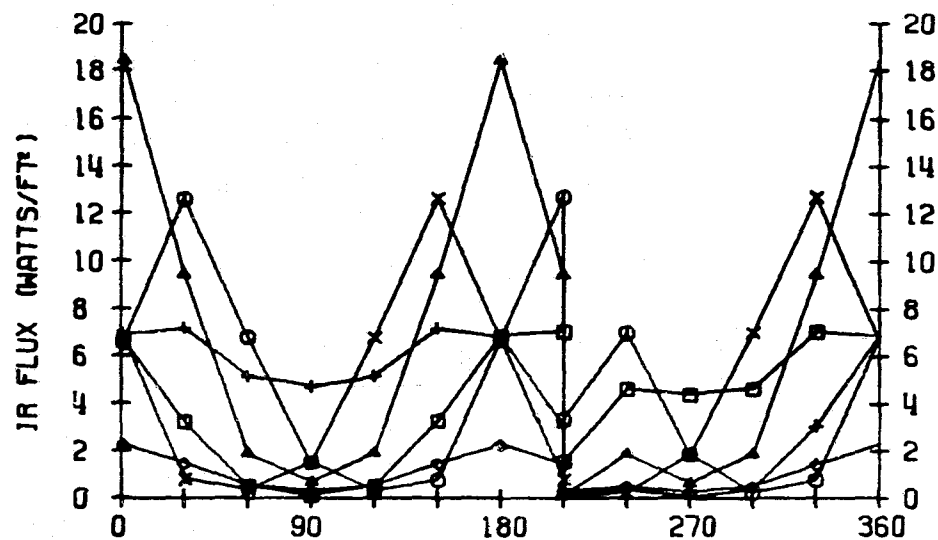
ORBIT POSITION (DEG)

ORBIT POSITION (DEG)

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 3

LOCATION 4

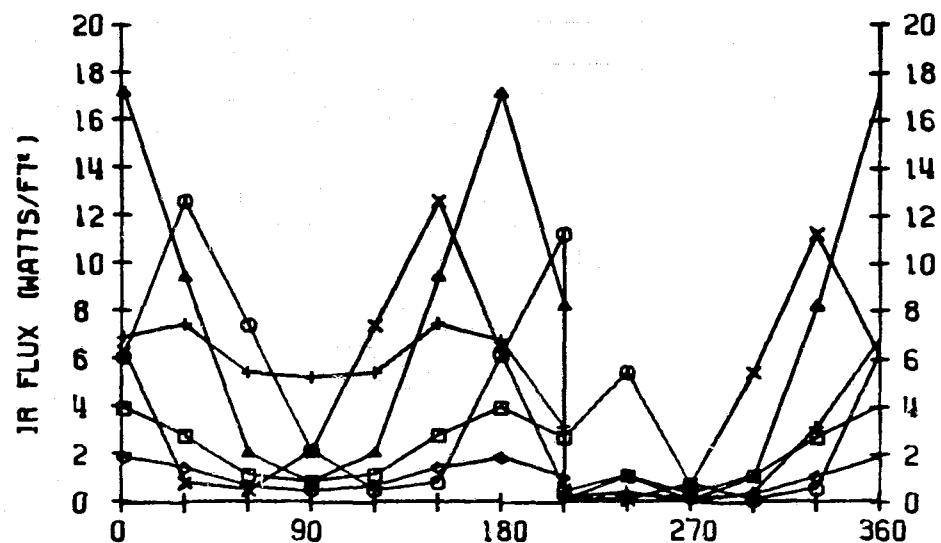


ORBIT POSITION (DEG)

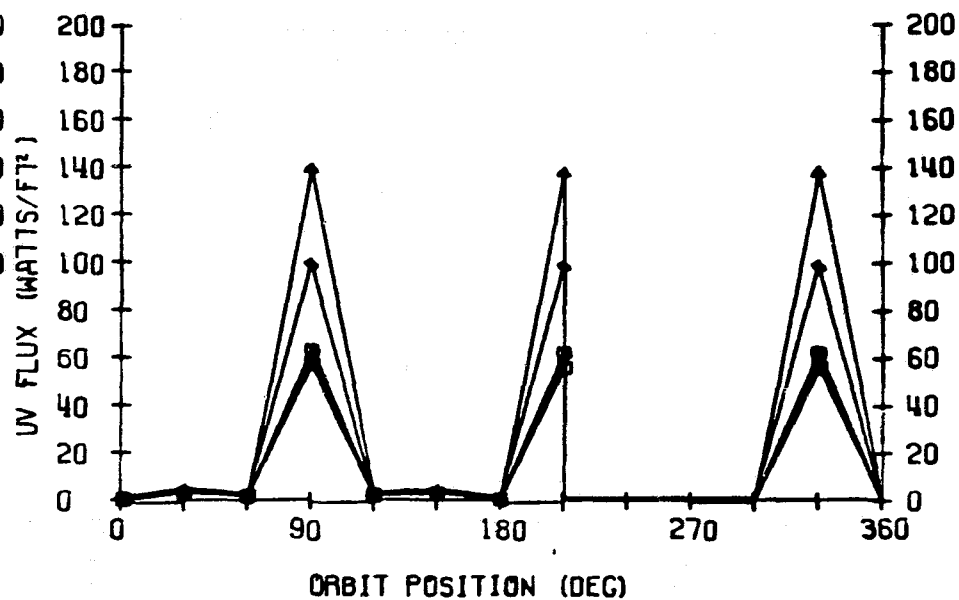
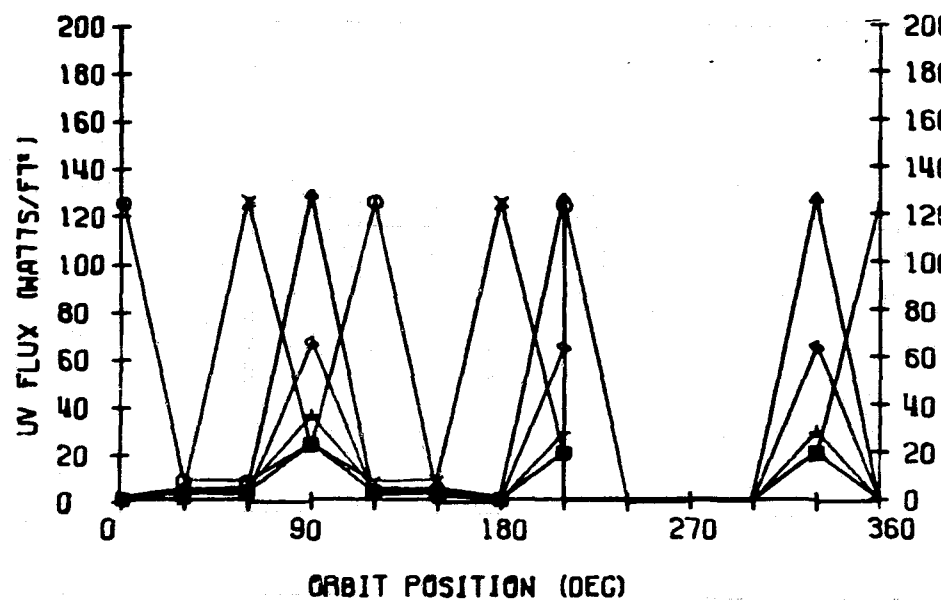
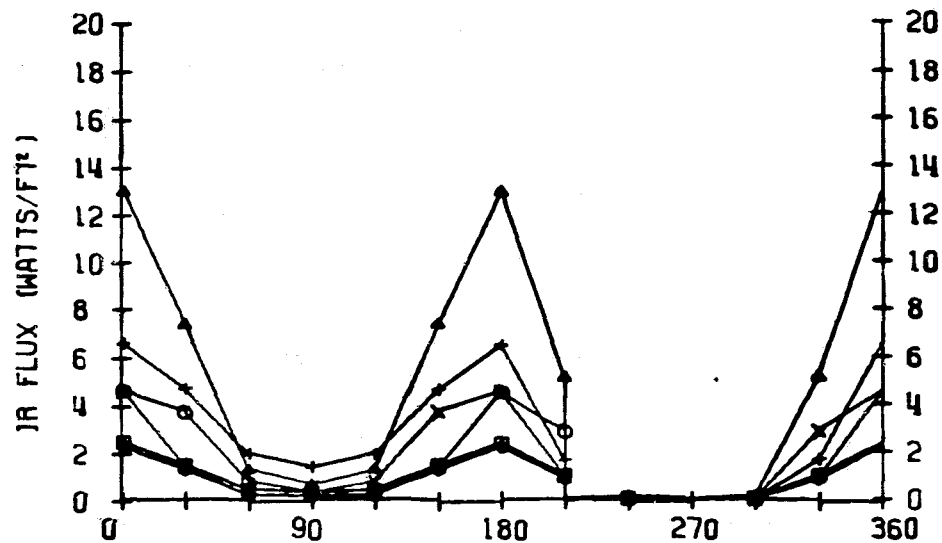
ORBIT POSITION (DEG)

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

LOCATION 5



LOCATION 6



ORBITAL AVERAGE FLUX INTENSITIES
EMITTED FROM CARGO BAY SURFACES (WATTS/FT²)

FOR

450 KM * BETA=45 DEG * PTC ORIENTATION * +Z EARTH FACING AT 0 DEG

	SURFACE DIRECTION	LOC. 1	LOC. 2	LOC. 3	LOC. 4	LOC. 5	LOC. 6
I	+X (□)	10.7	9.3	7.5	13.7	12.2	17.5
R	+Y (◇)	10.5	8.4	5.7	14.8	7.3	16.9
F	+Z (△)	0.2	0.2	0.1	2.7	1.5	5.9
L	-X (†)	10.5	9.3	8.1	13.1	7.4	14.2
U	-Y (x)	10.3	8.7	5.9	14.5	7.2	16.8
X	-Z (◇)	17.8	17.7	16.7	19.5	18.2	22.0